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     (FILE 'HOME' ENTERED AT 15:32:51 ON 14 JUL 2005)

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L1             0 SEA ABB=ON  PLU=ON  (US20040053351 OR US6743596)/PN
                 E FISCHER T/AU
L2           143 SEA ABB=ON  PLU=ON  ("FISCHER T"/AU OR "FISCHER T J"/AU)
                 E FSCHER TIM/AU
                 E FISCHER TIM/AU
L3            20 SEA ABB=ON  PLU=ON  ("FISCHER TIM"/AU OR "FISCHER TIMOTHY"/AU
                 OR "FISCHER TIMOTHY J"/AU)
                 E BAGLIN T/AU
L4            40 SEA ABB=ON  PLU=ON  ("BAGLIN T"/AU OR "BAGLIN T B"/AU OR
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L5             9 SEA ABB=ON  PLU=ON  ("TEJIDOR L"/AU OR "TEJIDOR LILIANA"/AU OR
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                 E AKZO NOBEL/CS,PA
L6          2155 SEA ABB=ON  PLU=ON  (AKZO (1A)NOBEL)/CS,PA
                 E BIOMERIEUX/CS,PA
L7           364 SEA ABB=ON  PLU=ON  (BIOMERIEUX/CS OR BIOMERIEUX/PA OR
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                 MARCY L ETOILE 69280 FR"/CS OR "BIOMERIEUX DEPARTEMENT R AND D
                 UNITE IMMUNOESSAIS CHEMIN DE L ORME MARCY L ETOILE 69280
                 FR"/CS OR "BIOMERIEUX DEPARTEMENT R AND D UNITE IMMUNOESSAIS
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                  SA MARCY L ETOILE 69280 FR"/CS OR "BIOMERIEUX STELHYS"/CS OR
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                 X USA"/PA OR "
                 E COAGULATION/CT
                 E E3+ALL
L8          32088 SEA ABB=ON  PLU=ON  COAGULATION+OLD,NT/CT
                 E E12
                 E E3+ALL
L9           2731 SEA ABB=ON  PLU=ON  COAGULANTS+OLD/CT
L10            32 SEA ABB=ON  PLU=ON  (L2 OR L3 OR L4 OR L5 OR L6 OR L7) AND (L8
                 OR L9)

     FILE 'REGISTRY' ENTERED AT 15:43:33 ON 14 JUL 2005
                 E TISSUE FACTOR/CN
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L11           1 SEA ABB=ON  PLU=ON  "TISSUE FACTOR (BLOOD-COAGULATION)"/CN
                D SCA
L12         293 SEA ABB=ON  PLU=ON  (TISSUE (1A) FACTOR#)/CNS

     FILE 'HCAPLUS' ENTERED AT 15:48:52 ON 14 JUL 2005
L13       14691 SEA ABB=ON  PLU=ON  (L11 OR L12) OR BLOOD(1A)COAGUL? (1A)(FACTO
                R?(1A)(3 OR III) OR FACTOR3# OR FACTORIII#) OR CEPHALOPLASTIN#
                OR COAGULIN# OR FIBROOLET? OR IL (1A)PT(1A)HS OR NEOPLASTIN#
                OR TISSUE (1A)FACTOR# OR THROMBOKININ OR THROMBOPLASTIN# OR
                THROMBOREL# OR TROMBOSTOP OR ZYMOPLASTIC
L14          12 SEA ABB=ON  PLU=ON  L10 AND L13

=> b hcap
FILE 'HCAPLUS' ENTERED AT 15:52:22 ON 14 JUL 2005
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FILE COVERS 1907 - 14 Jul 2005  VOL 143 ISS 3
FILE LAST UPDATED: 13 Jul 2005  (20050713/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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L14  ANSWER 1 OF 12  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:405393  HCAPLUS
DN   142:2950
ED   Entered STN:  19 May 2004
TI   International multicenter international sensitivity index (ISI)
     calibration of a new human tissue factor
     thromboplastin reagent derived from cultured human cells
AU   Houdijk, W. P. M.; Van Den Besselaar, A. M. H. P.
CS   bioMerieux bv, Boxtel, Neth.
SO   Journal of Thrombosis and Haemostasis (2004), 2(2), 266-270
     CODEN: JTHOA5; ISSN: 1538-7933
PB   Blackwell Publishing Ltd.
DT   Journal
LA   English
CC   9-15 (Biochemical Methods)
     Section cross-reference(s): 1
AB   The international sensitivity index (ISI) of the first working standard of
     Simplastin HTF, a new human tissue factor
     thromboplastin derived from cultured human cells, has been
     assessed in a calibration exercise in two Canadian and five European labs.
     Calibrations against international reference prepns. (IRP) were performed for
     the manual method and six types of automated coagulometers that cover the
     majority of clotting endpoint principles in routine use.  The ISI was
     method-dependent and varied between 1.03 and 1.29 when calibrated against
     rTF/95 (human IRP).  The ISI was also dependent on the route of
     calibration.  Compared with calibration against rTF/95, the ISIs obtained
     by calibration against RBT/90 (rabbit IRP) were on average 4.4% higher (P <
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0.005). Considering the principle of "like vs. like", the ISIs obtained by calibration against rTF/95 should be preferred.
ST simplastin international sensitivity index calibration **thromboplastin** blood coagulation anticoagulant
IT Anticoagulants
Blood analysis
Blood coagulation
Calibration
Human
(international multicenter international sensitivity index (ISI) calibration of new human **tissue factor** **thromboplastin** reagent derived from cultured human cells)
IT 446277-18-5, Simplastin HTF
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(international multicenter international sensitivity index (ISI) calibration of new human **tissue factor** **thromboplastin** reagent derived from cultured human cells)
IT 9001-26-7, Prothrombin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(international multicenter international sensitivity index (ISI) calibration of new human **tissue factor** **thromboplastin** reagent derived from cultured human cells)
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Bader, R; Thromb Haemost 1994, V71, P292 HCAPLUS
(2) Fairweather, R; Arch Pathol Laboratory Med 1998, V122, P768 HCAPLUS
(3) Hirsh, J; Chest 2001, V119, P8S HCAPLUS
(4) Poggio, M; Thromb Haemost 1989, V62, P868 HCAPLUS
(5) Poller, L; Laboratory Techniques in Thrombosis -- a Manual. ECAT Assay Procedures 1999, P45
(6) Rico-Lazarowski, A; Thromb Haemost 2001, V86(Suppl), PCD3185
(7) Roussi, J; Thromb Haemost 1994, V72, P698 HCAPLUS
(8) Tomenson, J; Thromboplastin Calibration and Oral Anticoagulant Control 1984, P87
(9) Tripodi, A; Thromb Haemost 1992, V67, P42 HCAPLUS
(10) Tripodi, A; Thromb Haemost 1995, V74, P1368 HCAPLUS
(11) Tripodi, A; Thromb Haemost 1998, V79, P439 HCAPLUS
(12) Valdes-Camin, R; Blood Coagul Fibrinolysis 1994, V5, P617 HCAPLUS
(13) van den Besselaar, A; Thromb Haemost 1993, V70, P794 HCAPLUS
(14) van den Besselaar, A; Thromb Haemost 1999, V81, P66 HCAPLUS
(15) van den Besselaar, A; Thromb Haemost 2000, V84, P664 HCAPLUS
(16) van den Besselaar, A; Thromb Haemost 2002, V88, P459 HCAPLUS
(17) WHO Expert Committee on Biological Standardization; WHO Techn Report Series 1999, V889, P64

L14 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:697159 HCAPLUS
DN 139:194022
ED Entered STN: 05 Sep 2003
TI Method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome
IN Toh, Cheng Hock; **Tejidor, Liliana**; Neisheim, Mike; Jones, Gregory
PA **Biomerieux, Inc., USA**
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-53
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 7, 14
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003073099	A1	20030904	WO 2003-US5980	20030227

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        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    US 2003228625        A1    20031211    US 2003-375251         20030227
    EP 1476752           A1    20041117    EP 2003-711279         20030227
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    JP 2005519267        T2    20050630    JP 2003-571735         20030227
PRAI US 2002-359932P     P     20020227
    US 2002-363073P      P     20020311
    US 2002-396392P      P     20020717
    US 2002-404652P      P     20020820
    WO 2003-US5980       W     20030227
CLASS
 PATENT NO.       CLASS  PATENT FAMILY CLASSIFICATION CODES
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 WO 2003073099    ICM    G01N033-53
 WO 2003073099    ECLA   G01N033/92
 US 2003228625    NCL    435/007.100; 436/071.000
                  ECLA   G01N033/92
 JP 2005519267    FTERM  2G045/CA26; 2G045/DA62; 2G045/FA40; 2G045/FB01;
                         2G045/FB03; 2G045/FB06; 2G045/JA01; 4B063/QA01;
                         4B063/QA19; 4B063/QQ03; 4B063/QQ36; 4B063/QQ79;
                         4B063/QR41; 4B063/QR69; 4B063/QS12; 4B063/QS24;
                         4B063/QS36; 4B063/QX01; 4B063/QX02; 4C084/AA02;
                         4C084/AA03; 4C084/BA44; 4C084/CA62; 4C084/MA65;
                         4C084/NA14; 4C084/ZA312; 4C084/ZA532; 4C084/ZA542;
                         4C084/ZA892; 4C084/ZB052; 4C084/ZB112; 4C084/ZB332;
                         4C084/ZB352; 4C084/ZB382; 4C084/ZC202
AB  A method for diagnosing and monitoring subjects for hemostatic
    dysfunction, severe infection and systematic inflammatory response
    syndrome is provided whereby lipoproteins are examined for abnormalities,
    particularly for prothrombinase enhancement, through quant. and qual.
    anal.
ST  diagnosing monitoring hemostatic dysfunction severe infection systematic
    inflammatory syndrome
IT  Lipoproteins
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
    (Biological study); USES (Uses)
       (Abnormal; method for diagnosing and monitoring hemostatic dysfunction,
       severe infection and systematic inflammatory response syndrome)
IT  Apolipoproteins
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
    (Biological study); USES (Uses)
       (B; method for diagnosing and monitoring hemostatic dysfunction, severe
       infection and systematic inflammatory response syndrome)
IT  Proteins
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
       (C-reactive; method for diagnosing and monitoring hemostatic
       dysfunction, severe infection and systematic inflammatory response
       syndrome)
IT  Infection
       (Severe; method for diagnosing and monitoring hemostatic dysfunction,
       severe infection and systematic inflammatory response syndrome)
IT  Annexins
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
       (V; method for diagnosing and monitoring hemostatic dysfunction, severe
       infection and systematic inflammatory response syndrome)
IT  Blood coagulation
```

(disorder; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT **Blood coagulation**
(disseminated intravascular; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(intermediate-d.; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(low-d.; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Binders
Blood analysis
Blood plasma
Blood serum
Chromatography
Diagnosis
Human
NMR spectroscopy
Samples
Sepsis
Surface area
Thrombus
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Inflammation
(systemic inflammatory response syndrome; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(very-low-d.; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(β-; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT 9002-04-4, Thrombin
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT **9035-58-9, Tissue factor** (blood-coagulation)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT 9001-26-7, Prothrombin 72162-96-0, Prothrombinase
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL

(Biological study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Yu; US 20020150534 A1 2002 HCAPLUS

L14 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:435205 HCAPLUS
DN 139:19321
ED Entered STN: 06 Jun 2003
TI Method for predicting an increased likelihood of antiphospholipid syndrome in a patient using phospholipids and waveform analysis
IN Ortel, Thomas L.; Su, Zuowei; Braun, Paul J.; **Tejidor, Liliana**
PA USA
SO U.S. Pat. Appl. Publ., 47 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM G01N033-53
INCL 435007900
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 14, 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003104493	A1	20030605	US 2002-185186	20020628
	WO 2003083490	A2	20031009	WO 2002-US20618	20020628
	WO 2003083490	A3	20040415		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1436628	A2	20040714	EP 2002-806824	20020628
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2005520170	T2	20050707	JP 2003-580871	20020628
PRAI	US 2001-302261P	P	20010629		
	US 2001-318755P	P	20010911		
	WO 2002-US20618	W	20020628		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003104493	ICM	G01N033-53
	INCL	435007900
US 2003104493	NCL	435/007.900
	ECLA	G01N021/77; G01N033/557; G01N033/68B; G01N033/68V; G01N033/86; G01N033/92; G06F019/00A
WO 2003083490	ECLA	G01N021/77; G01N033/557; G01N033/68B; G01N033/68V; G01N033/86; G01N033/92; G06F019/00A
JP 2005520170	FTERM	4B063/QA01; 4B063/QA12; 4B063/QA19; 4B063/QQ03; 4B063/QQ43; 4B063/QQ44; 4B063/QR08; 4B063/QR42; 4B063/QR56; 4B063/QS25; 4B063/QS34; 4B063/QX02

AB A method for predicting that an individual has antiphospholipid syndrome or an increased likelihood of having antiphospholipid syndrome, includes: (a) providing a test sample from an individual; (b) combining the test sample with phospholipids; (c) directing a light beam at the test sample and monitoring light scattering or transmittance over time so as to provide a time-dependent measurement profile; (d) determining if a value or a slope at or over a particular time in the time-dependent measurement

profile is beyond a corresponding predetd. value or slope threshold; and if the value or slope in the time-dependent measurement profile is beyond the predetd. threshold, then determining that the individual has antiphospholipid syndrome or an increased risk of antiphospholipid syndrome. The phospholipids can be provided as part of a coagulation reagent, or as part of a reagent where coagulation is not activated. Confirmatory assays for particular antibodies to phospholipid binding proteins can be performed.

ST antiphospholipid syndrome diagnosis phospholipid waveform analysis; antibodies phospholipid light scattering time profile

IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(C-reactive; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Apolipoproteins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PUR (Purification or recovery); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(H, antibodies to, immunoassay for; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Antibodies and Immunoglobulins
RL: AMX (Analytical matrix); ANST (Analytical study)
(IgG; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Samples
(anal. of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Cardiolipins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antibodies to, immunoassay for; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Blood analysis
Human
Immunoassay
Light scattering
Liposomes
Optical transmission
Risk assessment
Time
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Antiphospholipid syndrome
RL: ADV (Adverse effect, including toxicity); ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Antibodies and Immunoglobulins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylcholines, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylethanolamines, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylinositols

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylserines
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phospholipids, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Analysis
Process automation
(automated anal., for thrombosis and hemostasis testing; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Algorithm
(automated; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Analysis
(clin., APTT assay; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Lipoproteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(complexes, with C-reactive protein; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Autoimmune disease
(determining increased likelihood of having; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Blood coagulation
(disorder; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Blood coagulation
(disseminated intravascular, patient not having; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Metals, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(divalent, reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Immunoassay
(enzyme-linked immunosorbent assay, confirmatory assay for antiphospholipid antibodies; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Immunoassay
(latex agglutination test, confirmatory assay for antiphospholipid antibodies; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Therapy
(monitoring; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Simulation and Modeling, physicochemical
(neural network; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Platelet (blood)
(neutralization test; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Anticoagulants
(oral; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Proteins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(phospholipid-binding, antibodies to; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Cations
(phospholipids added in absence of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Coagulants
(phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Reagents
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Spectrometers
(photooptical coagulation analyzers; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Thrombosis
(predicting increased risk of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Daboia russelli
(reagent containing liposomes and venom of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Halides
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Mammalia
(reagents from tissue of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Animal tissue
Brain
Placenta
(reagents from; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Venoms
(snake, reagent containing liposomes and Russel's viper; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Abortion
(spontaneous; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Lupus erythematosus
(systemic, determining increased likelihood of having; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Embolism
(thromboembolism; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT 163663-01-2, Innovin 229637-90-5, Simplastin L
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT 107-73-3, Phosphorylcholine
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(in determination of C-reactive protein; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT 535969-18-7
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagent containing liposomes and; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT 9035-58-9, Blood-coagulation factor
III 72162-96-0, Thromboplastin

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT 9001-26-7, Prothrombin
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(time reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT 537732-37-9 537732-38-0 537732-39-1 537732-40-4
RL: PRP (Properties)
(unclaimed nucleotide sequence; method for predicting an increased likelihood of antiphospholipid syndrome in a patient using phospholipids and waveform anal.)

L14 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:966970 HCAPLUS
DN 138:21824
ED Entered STN: 22 Dec 2002
TI Method for detecting a lipoprotein-acute phase protein complex and predicting an increased risk of system failure or mortality
IN **Fischer, Timothy J.**; Downey, Colin; Nesheim, Mike; Samis, John A.; **Tejidor, Liliana**; Toh, Cheng Hock; Walker, John B.
PA USA
SO U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U. S. Ser. No. 591,642, abandoned.
CODEN: USXXCO
DT Patent
LA English
IC ICM G01N031-00
INCL 702022000
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 14
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002193949	A1	20021219	US 2001-19087	20011219
	JP 11507131	T2	19990622	JP 1996-501365	19960605
	JP 3534415	B2	20040607	JP 1997-501365	19960605
	US 6101449	A	20000808	US 1997-859773	19970521
	US 6321164	B1	20011120	US 1997-1647	19971231
	EP 1522860	A1	20050413	EP 2004-25887	20000204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	US 2002019706	A1	20020214	US 2001-850255	20010507
	US 6564153	B2	20030513		
	WO 2001096864	A2	20011220	WO 2001-US18611	20010608
	WO 2001096864	A3	20030206		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	JP 2004503254	T2	20040205	JP 2002-510942	20010608
	US 2001053959	A1	20011220	US 2001-918214	20010730
	US 6898532	B1	20050524	US 2003-377228	20030228
	US 2004248308	A1	20041209	US 2004-884293	20040702
PRAI	US 1995-477839	A1	19950607		
	US 1997-859773	A2	19970521		
	US 1997-1647	A2	19971231		

US 1999-244340	A2	19990204
US 2000-591642	B2	20000609
WO 2001-US18611	W	20010608
WO 1996-US8905	W	19960605
EP 2000-913371	A3	20000204
US 2000-517496	A1	20000302
US 2003-377228	A1	20030228

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002193949	ICM	G01N031-00
	INCL	702022000
US 2002193949	NCL	702/022.000
	ECLA	G01N033/86; G01N033/92
US 6101449	NCL	702/022.000; 702/028.000; 702/030.000; 702/032.000; 703/011.000
	ECLA	G06F019/00A2
US 6321164	NCL	702/022.000; 702/028.000; 702/030.000; 702/032.000; 703/011.000
	ECLA	G06F019/00A2
US 2002019706	NCL	702/022.000; 436/069.000; 702/019.000; 702/030.000; 702/032.000
	ECLA	G01N033/49B; G06F019/00A2
JP 2004503254	FTERM	2G045/AA25; 2G045/BA20; 2G045/CA26; 2G045/FA11; 2G045/FB01; 2G045/GC10; 2G045/GC12; 2G045/JA01; 4B063/QA01; 4B063/QA19; 4B063/QQ03; 4B063/QR01; 4B063/QR48; 4B063/QS26; 4B063/QS31; 4B063/QX01
US 2001053959	NCL	702/022.000
	ECLA	C07K016/18; G06F019/00A2
US 6898532	NCL	702/022.000; 702/019.000; 702/030.000; 702/032.000; 703/011.000
US 2004248308	NCL	436/069.000

AB A method for diagnosing a condition of a patient involves the steps of (a) adding one or more reagents to a test sample from a patient, the test samples comprising at least part of a blood sample from the patient, in order to cause formation of a complex comprising at least one acute phase protein at least one human lipoprotein, while causing substantially no fiber polymerization; (b) measuring the formation of the complex over time so as to derive a time-dependent measurement profile, and (c) determining a slope and/or total change in the time-dependent measurement profile, so as to diagnose a condition of the patient. A greater formation of the complex is correlated to increased probability of death of the patient.

ST lipoprotein acute phase protein complex predicting risk system

IT Proteins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(C-reactive; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(SAA (serum amyloid A); lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(high-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(intermediate-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Blood analysis
Blood coagulation
Chylomicrons
Complexation
Diagnosis

Human
Optical transmission
(lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Apolipoproteins
Fibrins
Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(low-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(very-low-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT 60-00-4, EDTA, biological studies 68-04-2, Sodium citrate 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-39-3, Barium, biological studies 7440-70-2, Calcium, biological studies 8001-27-2, Hirudin 9000-94-6, Antithrombin 9005-49-6, Heparin, biological studies 71142-71-7, PPack 72162-96-0, **Thromboplastin** 93050-91-0, I2581
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

L14 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:553781 HCAPLUS
DN 133:132103
ED Entered STN: 11 Aug 2000
TI A method and apparatus for predicting the presence of hemostatic dysfunction in a patient sample
IN Toh, Cheng Hock; Downey, Colin; **Fischer, Timothy J.**
PA **Akzo Nobel** N.V., Neth.
SO PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-86
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 14

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000046603	A1	20000810	WO 2000-US2987	20000204
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2362055	AA	20000810	CA 2000-2362055	20000204
	EP 1147423	A1	20011024	EP 2000-913371	20000204
	EP 1147423	B1	20041110		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002541431	T2	20021203	JP 2000-597634	20000204
	AU 774889	B2	20040708	AU 2000-34833	20000204
	AU 2000034833	A5	20000825		
	AT 282208	E	20041115	AT 2000-913371	20000204
	EP 1522860	A1	20050413	EP 2004-25887	20000204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	ES 2231167	T3	20050516	ES 2000-913371	20000204
	US 2004248308	A1	20041209	US 2004-884293	20040702
PRAI	US 1999-244340	A	19990204		

EP 2000-913371 A3 20000204
WO 2000-US2987 W 20000204
US 2003-377228 A1 20030228

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000046603	ICM	G01N033-86
US 2004248308	NCL	436/069.000

AB A method is disclosed for predicting the presence of hemostatic dysfunction. At least one time-dependent measurement on an unknown sample is performed and a resp. property of the sample is measured over time so as to derive a time-dependent measurement profile. One or more predictor variables, including initial slope, are defined which sufficiently define the data of the time-dependent measurement profile. A model is then derived that represents the relationship between an abnormality and a set of predictor variables. Subsequently, the model is utilized to predict hemostatic dysfunction.

ST app hemostatic dysfunction

IT Fibrinogen degradation products
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(DD; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Acidosis
Apparatus
Blood analysis
Blood coagulation
Blood plasma
Diagnosis
Disease, animal
Hypoxia, animal
Infection
Liver, disease
Neoplasm
Parturition
Platelet (blood)
Pregnancy
Spectroscopy
Surgery
Therapy
Thrombus
Transplant rejection
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Fibrinogens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Artery
(aorta, aneurysm rupture; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT **Blood coagulation**
(disseminated intravascular; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Hemostatics
(dysfunction; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Inflammation
(systemic inflammatory response syndrome; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Injury
(trauma; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT 9001-26-7, Prothrombin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient)

IT 72162-96-0, **Thromboplastin**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)
IT 7439-93-2, Lithium, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(overdose; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Astion; Arch Pathol Lab Med 1992, V116, P995 MEDLINE
(2) Givens; US 5708591 A 1998
(3) Hoffman; Organon Teknika 1990, P3 MEDLINE
(4) Pohl; Haemostasis 1994, V24, P325 MEDLINE

L14 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:368697 HCAPLUS
DN 132:345127
ED Entered STN: 04 Jun 2000
TI Devices and methods for performing blood coagulation assays by piezoelectric sensing
IN Wu, Jogin R.; Moreno, Mario
PA **Akzo Nobel** N.V., Neth.
SO PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-00
CC 9-1 (Biochemical Methods)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000031529	A1	20000602	WO 1999-US27287	19991117
	WO 2000031529	C2	20021107		
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6200532	B1	20010313	US 1998-197481	19981120
	EP 1141699	A1	20011010	EP 1999-960444	19991117
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1998-197481	A1	19981120		
	WO 1999-US27287	W	19991117		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000031529	ICM	G01N033-00
WO 2000031529	ECLA	G01N027/00B1B; G01N033/49B
US 6200532	NCL	422/073.000; 073/064.410; 073/064.420; 073/064.430; 436/069.000
	ECLA	G01N027/00B1B; G01N033/49B

AB A device and method for performing blood coagulation assays, particularly prothrombin times and activated partial **thromboplastin** times and other clotting parameters are disclosed. The device comprises a disposable strip (figures 1, 2 and 4) (containing a sample inlet (8) for sample delivery, a capillary channel for driving force, and a reaction chamber (1) with an appropriate dry reagent for a specific assay) and a piezoelec. sensor (3). The device could also include a heating element for temperature control, and a magnetic bender (2). The magnetic bender is driven by an electromagnetic field generator (6) and is attached onto a piezoelec. film (3) in contact with the blood sample. An elec. signal generated at the piezo film is characterized by its frequency and amplitude due to the movement of the attached metal film. The signal collected at the site of the film represents the process of a biochem. reaction in the reaction chamber, while the blood sample proceeds to the point at which clot formation starts.

ST blood coagulation assay piezoelec sensor
IT Membranes, nonbiological
(asym.; devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT Blood analysis
Blood coagulation
Capillary tubes
Energy transfer
Filters
Heaters
IR sources
Interferometry
Mirrors
Piezoelectric sensors
(devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT Reagents
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT Fluoropolymers, uses
RL: DEV (Device component use); USES (Uses)
(devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT Lenses
(focusing; devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT Polymers, uses
RL: DEV (Device component use); USES (Uses)
(polysulfonates, asym. membrane of; devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT 9002-05-5, **Thromboplastin**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(activated partial **thromboplastin** time; devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT 12047-27-7, Barium Titanium oxide, uses 12626-81-2, Lead-zirconate-titanate 24937-79-9, Polyvinylidene fluoride 37349-19-2, Lead-magnesium-niobate
RL: DEV (Device component use); USES (Uses)
(devices and methods for performing blood coagulation assays by piezoelec. sensing)
IT 9001-26-7, Prothrombin
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(time; devices and methods for performing blood coagulation assays by piezoelec. sensing)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Meller; US 5892144 A 1999 HCAPLUS
(2) Siegal; US 4450375 A 1984
(3) Siegal; US 4629926 A 1986

L14 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:464135 HCAPLUS
DN 131:85163
ED Entered STN: 29 Jul 1999
TI A method for predicting an abnormal level of clotting proteins using neural network simulation
IN Braun, Paul; Givens, Thomas B.; **Fischer, Timothy J.**
PA **Akzo Nobel** N.V., Neth.
SO PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DT Patent
LA English

IC G01N033-49; G01N033-86; G06F019-00
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 7, 14
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9934208	A1	19990708	WO 1998-US27865	19981230
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 11507131	T2	19990622	JP 1996-501365	19960605
	JP 3534415	B2	20040607	JP 1997-501365	19960605
	US 6321164	B1	20011120	US 1997-1647	19971231
	CA 2316361	AA	19990708	CA 1998-2316361	19981230
	AU 9919503	A1	19990719	AU 1999-19503	19981230
	EP 1042669	A1	20001011	EP 1998-964342	19981230
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002500360	T2	20020108	JP 2000-526808	19981230
	US 2001053959	A1	20011220	US 2001-918214	20010730
PRAI	US 1995-477839	A	19950607		
	US 1997-1647	A2	19971231		
	WO 1996-US8905	W	19960605		
	US 1997-859773	A2	19970521		
	WO 1998-US27865	W	19981230		
	US 2000-517496	A1	20000302		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9934208	IC	G01N033-49IC G01N033-86IC G06F019-00
WO 9934208	ECLA	G01N033/49B
US 6321164	NCL	702/022.000; 702/028.000; 702/030.000; 702/032.000; 703/011.000
	ECLA	G06F019/00A2
US 2001053959	NCL	702/022.000
	ECLA	C07K016/18; G06F019/00A2

AB A method is disclosed for predicting the presence of an abnormal level of one or more proteins in the clotting cascade from at least one time-dependent measurement profile. At least one time-dependent measurement on an unknown sample is performed and a resp. property of the sample is measured over time so as to derive a time-dependent measurement profile. A set of a plurality of predictor variables are defined which sufficiently define the data of the time-dependent measurement profile. A model is then derived that represents the relationship between the abnormality and the set of predictor variables. Subsequently, the model is utilized to predict which protein or proteins in the clotting cascade are at an abnormal level, with the prediction being a better prediction than clot time alone. Neural networks using self-organizing feature maps and learning vector quantization were used to analyze optical data from clin. coagulation tests. Self-organizing feature maps using an unsupervised learning algorithm were trained with data from normal donors, patients with abnormal levels of coagulation proteins and patients undergoing anticoagulant therapy. Specimen categories were distinguishable in these maps with varying levels of resolution A supervised neural network method, learning vector quantization, was used to train maps to classify coagulation data. These networks showed sensitivity greater than 0.6 and specificity greater than 0.85 for detection of several factor deficiencies and heparin.

ST clotting protein abnormality prediction neural network simulation; blood coagulation factor abnormality prediction

IT Proteins, specific or class
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(clotting; predicting abnormal level of clotting proteins using neural network simulation)

IT Blood

(disease, congenital or acquired; predicting abnormal level of clotting proteins using neural network simulation)
IT **Blood coagulation**
(extrinsic; predicting abnormal level of clotting proteins using neural network simulation)
IT **Blood coagulation**
(intrinsic; predicting abnormal level of clotting proteins using neural network simulation)
IT Simulation and Modeling, biological
(neural network; predicting abnormal level of clotting proteins using neural network simulation)
IT Anticoagulants
(oral, in known blood samples; predicting abnormal level of clotting proteins using neural network simulation)
IT Blood analysis
Blood coagulation
Simulation and Modeling, biological
Therapy
Thrombosis
(predicting abnormal level of clotting proteins using neural network simulation)
IT Fibrinogens
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagents; predicting abnormal level of clotting proteins using neural network simulation)
IT 72162-96-0, **Thromboplastin**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(APTT reagents; predicting abnormal level of clotting proteins using neural network simulation)
IT 9002-04-4, Thrombin
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(TT reagents; predicting abnormal level of clotting proteins using neural network simulation)
IT 9005-49-6, Heparin, analysis
RL: ANT (Analyte); ARU (Analytical role, unclassified); ANST (Analytical study)
(in known blood samples; predicting abnormal level of clotting proteins using neural network simulation)
IT 9001-24-5, Blood coagulation factor V 9001-25-6, Blood coagulation factor VII 9001-26-7, Blood coagulation factor II 9001-27-8, Blood coagulation factor VIII 9001-28-9, Blood coagulation factor IX 9001-29-0, Blood coagulation factor X 9001-30-3, Blood coagulation factor XII 9013-55-2, Blood coagulation factor XI
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(predicting abnormal level of clotting proteins using neural network simulation)
IT 229637-90-5, Simplastin L 229638-70-4, Platelin L
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(predicting abnormal level of clotting proteins using neural network simulation)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Fischer; 1997
(2) Givens; 1998
(3) Grossman; 1992

L14 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:354324 HCAPLUS
DN 130:349368
ED Entered STN: 09 Jun 1999
TI Blood coagulation monitoring device with liquid crystal and gradient

heater
IN Moreno, Mario; Wu, Jogin R.
PA Akzo Nobel N.V., Neth.
SO U.S., 17 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM G01N033-86
INCL 436069000
CC 9-1 (Biochemical Methods)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5908786	A	19990601	US 1997-989561	19971212
	WO 9930166	A1	19990617	WO 1998-US26453	19981211
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9918211	A1	19990628	AU 1999-18211	19981211
PRAI	US 1997-989561	A1	19971212		
	WO 1998-US26453	W	19981211		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5908786	ICM	G01N033-86
	INCL	436069000
US 5908786	NCL	436/069.000; 073/064.410; 073/064.430; 422/055.000; 422/058.000; 422/073.000; 422/101.000; 422/102.000; 436/164.000; 436/165.000; 436/177.000; 436/178.000
	ECLA	G01N033/86
WO 9930166	ECLA	G01N033/86

AB A device and method are disclosed for determining whether or not an individual's blood coagulation time is in a normal or abnormal range, and is particularly suitable for measuring prothrombin time and activated partial thromboplastin time coagulation values. The device includes a housing with an area for receiving a sample, a capillary channel or elongated area with an absorbent material, and a gradient heater. Liquid crystal and a coagulation agent can be disposed within the device to mix with a sample added to the device. The mixture passes along the capillary channel or absorbent material and stops moving when the sample has clotted. Due to the gradient heater and liquid crystal, the mixture may or may not change color, depending upon whether the individual has an abnormally short, normal, or abnormally long clot time.

ST blood coagulation time analyzer liq crystal; gradient heater blood coagulation time analyzer
IT Phospholipids, biological studies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(blood clotting reagent; blood coagulation monitoring device with liquid crystal and gradient heater)
IT Analytical apparatus
Blood analysis
Blood coagulation
Liquid crystals
Membrane filters
(blood coagulation monitoring device with liquid crystal and gradient heater)
IT Reagents
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(blood coagulation monitoring device with liquid crystal and gradient heater)
IT Capillary tubes
(channels; blood coagulation monitoring device with liquid crystal and gradient heater)
IT Electric heaters

(gradient heaters; blood coagulation monitoring device with liquid crystal and gradient heater)
IT Heaters
(gradient; blood coagulation monitoring device with liquid crystal and gradient heater)
IT 72162-96-0, **Thromboplastin**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(blood clotting reagent; blood coagulation monitoring device with liquid crystal and gradient heater)
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Burgess, D; IEEE/IRPS 1984
(2) Cusak; US 5302348 1994
(3) Cusak; US 5372946 1994
(4) Davis; US 5058999 1991
(5) Dribbon; US 5678566 1997
(6) Fleuren, E; IEEE/IRPS 1983
(7) Gavin; US 5534226 1996 HCAPLUS
(8) Hillman; US 4963498 1990 HCAPLUS
(9) Hillman; US 5140161 1992 HCAPLUS
(10) Hillman; US 5144139 1992 HCAPLUS
(11) Hillman; US 5164598 1992 HCAPLUS
(12) Hillman; US 5204525 1993 HCAPLUS
(13) Hillman; US 5300779 1994 HCAPLUS
(14) Oberhardt; US 4849340 1989 HCAPLUS
(15) Phillips; US 5135549 1992 HCAPLUS

L14 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:682605 HCAPLUS
DN 129:299887
ED Entered STN: 28 Oct 1998
TI Method and apparatus for optimizing assay sequencing on a random access clinical laboratory instrument so as to reduce reagent cross-contamination problems
IN Givens, Thomas B.; Hunley, Charles W.; **Fischer, Timothy J.**; Bowling, Regina J.
PA **Akzo Nobel** N.V., Neth.
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N001-36
ICS G01N035-00
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 7, 47
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9845679	A1	19981015	WO 1998-US7246	19980407
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9868983	A1	19981030	AU 1998-68983	19980407
PRAI	US 1997-841983	A2	19970408		
	WO 1998-US7246	W	19980407		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9845679	ICM	G01N001-36
	ICS	G01N035-00
WO 9845679	ECLA	G01N035/00

AB A method and apparatus are disclosed for optimizing the sequence of assays on an automated random access instrument so as to reduce reagent cross-contamination problems. A common vehicle for reagent cross-contamination is the reagent probe surface which transfers reagents

for the various tests. When a plurality of assays are run on a single sample, an initial best path (order of assays) is identified, after which the iterative process of looking for a better alternative begins. This process involves the application of a knowledge base concerning relationships associated with random access cross-contamination, to search the state space. The search strategy for optimizing the steps involved in performing three assays (activated partial **thromboplastin** time, prothrombin time, and heparin) on an automated analyzer is shown.

ST clin analyzer assay optimization cross contamination; blood coagulation automated assay optimization

IT **Blood coagulation**
Coagulation
(assays; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT Analytical apparatus
(automated; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT Fibrinogens
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT Computer application
(expert systems; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT Blood analysis
(method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT 9002-05-5, **Thromboplastin**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(activated partial time coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT 9005-49-6, Heparin, analysis
RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(anti-Xa coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT 9000-94-6, Antithrombin III 9001-91-6, Plasminogen 60202-16-6, Protein C
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT 9001-26-7, Prothrombin 9002-04-4, Thrombin
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(time coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Coville; US 4695430 A 1987
(2) Manabe; US 4971913 A 1990
(3) Mimura; US 5100622 A 1992
(4) Zakowski; US 4908320 A 1990

L14 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:603023 HCAPLUS
DN 127:246047
ED Entered STN: 22 Sep 1997
TI Properties of optical data from activated partial **thromboplastin** time and prothrombin time assays
AU Braun, Paul J.; Givens, Thomas B.; Stead, Andrew G.; Beck, Lisa R.; Gooch, Sheila A.; Swan, Robert J.; **Fischer, Timothy J.**
CS Organon Teknika Corporation, Durham, NC, 27712, USA
SO Thrombosis and Haemostasis (1997), 78(3), 1079-1087
CODEN: THHADQ; ISSN: 0340-6245
PB Schattauer
DT Journal
LA English
CC 13-5 (Mammalian Biochemistry)
Section cross-reference(s): 9
AB Changes in characteristics of optical transmittance data from coagulation assays were examined as a function of concentration of coagulation proteins or anticoagulants. Transmittance data were collected for activated partial **thromboplastin** time (APTT) and prothrombin time (PT) assays from: 1) plasmas prepared by mixing normal plasmas with deficient plasmas to give varying levels of coagulation proteins; 2) plasmas containing added heparin; and 3) 200 specimen plasmas that were also assayed for fibrinogen, coagulation factors, and other components. Optical profiles were characterized using a set of parameters describing onset and completion of coagulation, magnitude of signal change, rate of coagulation and other properties. Results indicated that parameters other than those typically reported for APTT and PT are associated with individual deficiencies, but that diagnosis of specimen status on the basis of optical data is complex. These results suggest possibilities for expanded interpretation of PT/APTT optical data for clin. or research applications.
ST blood anticoagulant thrombosis coagulation factor spectroscopy
IT Anticoagulants
Blood analysis
Blood coagulation
(optical data from activated partial **thromboplastin** time and prothrombin time assays)
IT Blood-coagulation factors
Fibrinogens
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(optical data from activated partial **thromboplastin** time and prothrombin time assays)
IT 9000-94-6, Antithrombin 9001-24-5, Blood-coagulation factor V 9001-25-6, Blood-coagulation factor VII 9001-26-7, Prothrombin 9001-27-8, Factor VIII 9001-28-9, Factor IX 9001-29-0, Factor X 9001-30-3, Blood-coagulation factor XII 9002-05-5, **Thromboplastin** 9013-55-2, Blood-coagulation factor XI 9035-58-9, **Thromboplastin** 72162-96-0, **Thromboplastin**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(optical data from activated partial **thromboplastin** time and prothrombin time assays)

L14 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:529275 HCAPLUS
DN 121:129275
ED Entered STN: 17 Sep 1994
TI Properties of a new prothrombin time reagent based on recombinant **tissue factor** and synthetic phospholipids
AU Kolde, Hans Juergen; Hawkins, P.; **Tejidor, L.**; Denzler, B.; Ramirez, I.
CS Baxter Diagn., Unterschleissheim, D-85716, Germany
SO Klinisches Labor (1993), 39(7/8), 511-21
CODEN: KLLAEA; ISSN: 0941-2131

DT Journal
LA German
CC 9-15 (Biochemical Methods)
AB The use of recombinant human **tissue factor** permits the standardized production of **thromboplastin** reagents (Innovin, (I), Baxter Diagnostics). I, which is produced from synthetic phospholipids and recombinant **tissue factor**, has several advantages in comparison to conventional **thromboplastins**. Its turbidity is at least 10 fold less, and it does not tend to sediment. A better precision can therefore be achieved. In comparison to various other reagents, which were studied in parallel, it is less sensitive to heparin. Due to the excellent factor sensitivity of I, a better correlation between extrinsic factor concentration and prothrombin time is achieved in comparison to other sensitive **thromboplastins**. The results of I and British comparative **thromboplastin** (BCT) are very similar and very close to the mean values of factors II, VII and X in patients with stable oral anticoagulation.
ST prothrombin time reagent recombinant **tissue factor**; phospholipid prothrombin time reagent; **thromboplastin** reagent recombinant **tissue factor**
IT **Blood coagulation**
(determination of, prothrombin time reagent for, recombinant **tissue factor** and synthetic phospholipids in)
IT Phospholipids, uses
RL: USES (Uses)
(in prothrombin time reagent)
IT **9035-58-9, Tissue factor**
RL: ANST (Analytical study)
(human recombinant, in prothrombin time reagent)

L14 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:531408 HCAPLUS
DN 115:131408
ED Entered STN: 05 Oct 1991
TI Method of monitoring reagent delivery in a scanning spectrophotometer
IN Driscoll, Richard Cornelius; **Fischer, Timothy J.**
PA AKZO N. V., Neth.
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N021-00
ICS C08L089-00
CC 9-5 (Biochemical Methods)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9108461	A1	19910613	WO 1990-US7068	19901203
	W: AU, CA, FI, GR, JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	US 5068181	A	19911126	US 1989-443953	19891201
	AU 9169512	A1	19910626	AU 1991-69512	19901203
	AU 655577	B2	19950105		
	EP 502983	A1	19920916	EP 1991-901116	19901203
	EP 502983	B1	19960828		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	AT 142018	E	19960915	AT 1991-901116	19901203
	ES 2095310	T3	19970216	ES 1991-901116	19901203
	CA 2069887	C	20040210	CA 1990-2069887	19901203
	JP 05502723	T2	19930513	JP 1991-501583	19911218
	JP 2902108	B2	19990607		
	FI 9202478	A	19920529	FI 1992-2478	19920529
	FI 101575	B1	19980715		
PRAI	US 1989-443953	A	19891201		
	WO 1990-US7068	A	19901203		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9108461	ICM	G01N021-00
	ICS	C08L089-00
US 5068181	NCL	435/013.000; 356/039.000; 436/056.000; 436/069.000; 436/164.000; 436/166.000; 436/172.000; 436/800.000

AB A method for measuring the concentration of a reagent in a reaction mixture comprises: adding dye to a reagent until the dye is at a given concentration in the reagent; mixing the reagent with a specimen to form a reaction mixture, wherein the specimen comprises a component which reacts with the reagent to form a reaction product; measuring the formation of reaction product at a first spectral region; measuring the concentration of dye in the reaction mixture at a second spectral region in which the dye has an optical characteristic, such as absorption or fluorescence, the second spectral region being different from the first spectral region; and determining the concentration of the reagent in the reaction mixture based on the concentration of dye measure. In a further aspect of the invention there is provided a reagent containing a dye useful in the above method. Patent Blue VF was added to **thromboplastin** at 1.15 mg/L for a final concentration at 0.75 mg/L. A 1-2% increase in prothrombin clotting occurred when the dye was added. No difference in the shape of the waveform at 565 nm was detected when dye was present, nor did the dye affect clot formation determination

ST reagent monitoring dye spectrophotometer; blood clotting assay reagent monitoring

IT Blood analysis
(reagent monitoring in spectrophotometric, dyes for)

IT **Blood coagulation**
(reagents for, monitoring of, in spectrophotometer, dyes for)

IT Chemicals
(reagents, monitoring, in spectrophotometer, dyes for)

IT Spectrometers
(scanning, reagent monitoring in, dyes for)

IT 81-88-9, Rhodamine B
RL: ANST (Analytical study)
(for calcium chloride monitoring in blood spectrophotometry)

IT 129-17-9, Patent Blue VF
RL: ANST (Analytical study)
(for reagent monitoring in spectrophotometer)

IT 9002-04-4, Thrombin 9002-05-5, **Thromboplastin** 10043-52-4, Calcium chloride, biological studies
RL: ANST (Analytical study)
(monitoring, in spectrophotometer, dyes for)

=> b home
FILE 'HOME' ENTERED AT 15:52:30 ON 14 JUL 2005

=>

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=> b reg
FILE 'REGISTRY' ENTERED AT 15:45:26 ON 14 JUL 2005
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STRUCTURE FILE UPDATES:   13 JUL 2005  HIGHEST RN 854992-86-2
DICTIONARY FILE UPDATES:  13 JUL 2005  HIGHEST RN 854992-86-2

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*                                                                       *
* The CA roles and document type information have been removed from     *
* the IDE default display format and the ED field has been added,       *
* effective March 20, 2005.  A new display format, IDERL, is now        *
* available and contains the CA role and document type information.     *
*                                                                       *
*************************************************************************

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Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d ide  l11 tot

L11  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   9035-58-9  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Blood-coagulation factor III (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Cephaloplastin
CN   Coagulin
CN   Coagulin (enzyme)
CN   Excel
CN   Excel S
CN   Fibrolet
CN   IL-PT HS
CN   Neoplastin
CN   Procoagulant tissue factor
CN   Thrombokinin
CN   Thromboplastin
CN   Thromboplastin C
CN   Thromboplastin FS
CN   Thromborel
CN   Tissue factor (blood-coagulation)
CN   Tissue thromboplastin
CN   Trombostop
CN   Zymoplastic substance
DR   9023-20-5
MF   Unspecified
CI   COM, MAN
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
       CA, CABA, CANCERLIT, CAPLUS, CHEMCATS, CHEMLIST, CIN, DDFU, DIOGENES,
       DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PROMT,
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       TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, TSCA**
        (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            3707 REFERENCES IN FILE CA (1907 TO DATE)
             193 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            3715 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   9002-04-4  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Thrombin (8CI, 9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Blood-coagulation factor II, activated
CN   Blood-coagulation factor IIa
CN   E.C. 3.4.21.5
CN   E.C. 3.4.4.13
CN   Factor IIa
CN   Thrombase
CN   Thrombin JMI
CN   Thrombin-C
CN   Thrombinar
CN   Thrombofort
CN   Thrombostat
CN   Topical
CN   Tropostasin
DR   8050-02-0, 8059-56-1, 9014-41-9, 105881-84-3, 53028-63-0
MF   Unspecified
CI   COM, MAN
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
       CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,
       CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA,
       MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PATDPASPC, PIRA, PROMT,
       RTECS*, TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, TSCA**
        (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

           18046 REFERENCES IN FILE CA (1907 TO DATE)
             925 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           18071 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his full

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     FILE 'REGISTRY' ENTERED AT 08:20:14 ON 15 JUL 2005
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                E THROMBIN/CN
L2            1 SEA ABB=ON  PLU=ON  THROMBIN/CN
L3          544 SEA ABB=ON  PLU=ON  THROMBIN/CNS
                E FIBRIN/CN
L4          148 SEA ABB=ON  PLU=ON  FIBRIN/CNS

     FILE 'HCAPLUS' ENTERED AT 08:25:54 ON 15 JUL 2005
L5         8993 SEA ABB=ON  PLU=ON  L1 OR BLOOD (1A)COAGULAT?(1A)(FACTORIII OR
                FACTOR3 OR FACTOR (1A)(III OR 3)) OR CEPHALOPLASTIN# OR
                COAGULIN# OR FIBROLET OR IL (1A)(PTHS OR PT(1A)HS) OR NEOPLASTI
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          N# OR TISSUE (1A)FACTOR# OR THROMBOKININ#
L6         6652 SEA ABB=ON  PLU=ON  THROMBOPLASTIN### OR THROMBOREL# OR
          TROMBOSTOP OR ZYMOPLASTIC(1A)SUBSTANCE?
L7        33755 SEA ABB=ON  PLU=ON  L2 OR THROMBIN# OR BLOOD (1A)COGULAT?(1A)(F
          ACTORII# OR FACTOR2 OR FACTOR2A OR FACTOR(1A)(II# OR 2 OR 2A))
          OR THROMBASE OR THROMBINAR# OR THROMBOFORT OR THROMBOSTAT# OR
          TROPOSTATIN#
L8        70652 SEA ABB=ON  PLU=ON  FACTOR(1A)(II# OR 2 OR 2A)
L9            QUE ABB=ON  PLU=ON  L3
L10           QUE ABB=ON  PLU=ON  L4
L11       18729 SEA ABB=ON  PLU=ON  FIBRIN
              E FIBRIN/CT
              E E3+ALL
              E E2+ALL
L12        8211 SEA ABB=ON  PLU=ON  FIBRINS+OLD/CT
              E E8+ALL
L13       18223 SEA ABB=ON  PLU=ON  FIBRINOGENS+OLD,NT/CT
              E TISSUE FACTOR/CT
              E TISSUE FACTORS/CT
              E THROMBIN/CT
              E E3+ALL
L14       18071 SEA ABB=ON  PLU=ON  THROMBIN/CT
              E FIBRIN/CT
              E E3+ALL
L15          59 SEA ABB=ON  PLU=ON  "E.C.3.4.21.5" OR "E.C.3.4.4.13" OR
              "EC3.4.21.5" OR "EC3.4.4.13" OR (E(1A)C OR EC OR ENZYME (1A)
              CLASS?)(1A)("3.4.21.5" OR "3.4.4.13")
              E FISCHER T/AU
L16          143 SEA ABB=ON  PLU=ON  ("FISCHER T"/AU OR "FISCHER T J"/AU)
              E FISCHER TIM/AU
L17           24 SEA ABB=ON  PLU=ON  ("FISCHER TIM"/AU OR "FISCHER TIMO"/AU OR
              "FISCHER TIMOTHY"/AU OR "FISCHER TIMOTHY J"/AU)
              E BAGLIN T/AU
L18           40 SEA ABB=ON  PLU=ON  ("BAGLIN T"/AU OR "BAGLIN T B"/AU OR
              "BAGLIN T P"/AU OR "BAGLIN TREVOR"/AU OR "BAGLIN TREVOR P"/AU)
              E TEJIDOR L/AU
L19            9 SEA ABB=ON  PLU=ON  ("TEJIDOR L"/AU OR "TEJIDOR LILIANA"/AU OR
              "TEJIDOR LILIANA MARIA"/AU)
L20         2517 SEA ABB=ON  PLU=ON  (AKZO (1A)NOBEL OR BIOMERIEUX)/CS,PA
L21         2528 SEA ABB=ON  PLU=ON  (L11 OR L12 OR L13) (L)?POLYMER?
              E COAGULATION/CT
              E E3+ALL
L22       32094 SEA ABB=ON  PLU=ON  COAGULATION+OLD,NT/CT
              E COAGULANTS/CT
              E E3+ALL
L23         2733 SEA ABB=ON  PLU=ON  COAGULANTS+OLD/CT
              E BLOOD CLOT/CT
              E E3+ALL
              E E2
              E E3+ALL
L24         3390 SEA ABB=ON  PLU=ON  THROMBUS+OLD/CT
              E ANTICOAGULANTS/CT
              E E3+ALL
L25       22524 SEA ABB=ON  PLU=ON  ANTICOAGULANTS+OLD,NT/CT
              E THROMBOSIS/CT
              E E3+ALL
L26       11803 SEA ABB=ON  PLU=ON  THROMBOSIS+OLD,NT/CT
              E THROMBOLYTICS/CT
              E E3+ALL
L27         2534 SEA ABB=ON  PLU=ON  THROMBOLYTICS/CT
              E THROMBOMOD/CT
              E E4+ALL
              E THROMBOPLASTIN/CT
              E E3+ALL
              E E2
              E E3+ALL
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Search done by Noble Jarrell

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L28          820 SEA ABB=ON  PLU=ON  PROTHROMBINASE/CT
                 E ANTI-THROMBOT/CT
                 E ANTITHROMBOT/CT
                 E E5+ALL
L29              QUE ABB=ON  PLU=ON  PY<=2000 OR AY<=2000 OR PRY<=2000 OR
                 PD<20001027 OR AD<20001027 OR PRD<20001027
L30         5769 SEA ABB=ON  PLU=ON  (L5 OR L6) AND (L22 OR L23 OR L24 OR L25
                 OR L26 OR L27)
L31           14 SEA ABB=ON  PLU=ON  L30 AND (L16 OR L17 OR L18 OR L19 OR L20)
L32         5755 SEA ABB=ON  PLU=ON  L30 NOT L31
L33           60 SEA ABB=ON  PLU=ON  L32 AND L21
L34         1543 SEA ABB=ON  PLU=ON  (L22 OR L23 OR L24 OR L25 OR L26 OR L27)
                 (L) ?DETERMIN?
L35          334 SEA ABB=ON  PLU=ON  L34 AND L32
L36            5 SEA ABB=ON  PLU=ON  L35 AND L21
L37            5 SEA ABB=ON  PLU=ON  L36 AND L29
                 D BIB TOT
                 E GRAPH/CT
                 E MATH/CT
                 E E12+ALL
L38              QUE ABB=ON  PLU=ON  MATHEMATICAL METHODS+OLD,NT/CT OR PROFILE#
                 OR GRAPH#
L39            0 SEA ABB=ON  PLU=ON  L37 AND L38
L40            1 SEA ABB=ON  PLU=ON  L33 AND L38
                 E TURBID/CT
                 E TURBIDITY/CT
                 E E3+ALL
                 E E10
                 E E3+ALL
L41         4558 SEA ABB=ON  PLU=ON  (TURBIDIMETRY+NT OR TURBIDITY)/CT
L42            1 SEA ABB=ON  PLU=ON  L33 AND L41
L43           50 SEA ABB=ON  PLU=ON  L33 AND (L7 OR L8 OR L14 OR L14 OR L28)
L44           19 SEA ABB=ON  PLU=ON  L43 AND PHARMAC?/CC,SX
L45         6041 SEA ABB=ON  PLU=ON  (L5 OR L6) AND (L7 OR L8 OR L14 OR L14 OR
                 L28)
L46           15 SEA ABB=ON  PLU=ON  L45 AND (L16 OR L17 OR L18 OR L19 OR L20)
L47         6026 SEA ABB=ON  PLU=ON  L45 NOT L46
L48         4216 SEA ABB=ON  PLU=ON  L47 AND L29
L49           59 SEA ABB=ON  PLU=ON  L48 AND L21
L50           33 SEA ABB=ON  PLU=ON  L49 AND (L22 OR L23 OR L24 OR L26 OR L27)
L51            5 SEA ABB=ON  PLU=ON  L50 AND L26
                 E PROCOAG/CT
                 E E6+ALL
                 E BLOOD-COAGULATION FACTORS/CT
                 E E3+ALL
L52         1046 SEA ABB=ON  PLU=ON  (L22 OR BLOOD-COAGULATION FACTORS+NT/CT)
                 (L) PROCOAG?
L53            2 SEA ABB=ON  PLU=ON  L50 AND L52
L54           18 SEA ABB=ON  PLU=ON  L31 OR L46
L55           14 SEA ABB=ON  PLU=ON  L37 OR L40 OR L42 OR L51 OR L53

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L54 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:405393 HCAPLUS
DN 142:2950
ED Entered STN: 19 May 2004
TI International multicenter international sensitivity index (ISI) calibration of a new human **tissue factor** **thromboplastin** reagent derived from cultured human cells
AU Houdijk, W. P. M.; Van Den Besselaar, A. M. H. P.
CS **bioMerieux** bv, Boxtel, Neth.
SO Journal of Thrombosis and Haemostasis (2004), 2(2), 266-270
CODEN: JTHOA5; ISSN: 1538-7933
PB Blackwell Publishing Ltd.
DT Journal
LA English
CC 9-15 (Biochemical Methods)
Section cross-reference(s): 1
AB The international sensitivity index (ISI) of the first working standard of Simplastin HTF, a new human **tissue factor** **thromboplastin** derived from cultured human cells, has been assessed in a calibration exercise in two Canadian and five European labs. Calibrations against international reference prepns. (IRP) were performed for the manual method and six types of automated coagulometers that cover the majority of clotting endpoint principles in routine use. The ISI was method-dependent and varied between 1.03 and 1.29 when calibrated against rTF/95 (human IRP). The ISI was also dependent on the route of calibration. Compared with calibration against rTF/95, the ISIs obtained by calibration against RBT/90 (rabbit IRP) were on average 4.4% higher ($P < 0.005$). Considering the principle of "like vs. like", the ISIs obtained by calibration against rTF/95 should be preferred.
ST simplastin international sensitivity index calibration **thromboplastin** blood coagulation anticoagulant
IT **Anticoagulants**
Blood analysis
Blood coagulation
Calibration
Human
(international multicenter international sensitivity index (ISI) calibration of new human **tissue factor** **thromboplastin** reagent derived from cultured human cells)
IT 446277-18-5, Simplastin HTF
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(international multicenter international sensitivity index (ISI) calibration of new human **tissue factor** **thromboplastin** reagent derived from cultured human cells)
IT 9001-26-7, Prothrombin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(international multicenter international sensitivity index (ISI) calibration of new human **tissue factor** **thromboplastin** reagent derived from cultured human cells)
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Bader, R; Thromb Haemost 1994, V71, P292 HCAPLUS

(2) Fairweather, R; Arch Pathol Laboratory Med 1998, V122, P768 HCAPLUS
(3) Hirsh, J; Chest 2001, V119, P8S HCAPLUS
(4) Poggio, M; Thromb Haemost 1989, V62, P868 HCAPLUS
(5) Poller, L; Laboratory Techniques in Thrombosis -- a Manual. ECAT Assay Procedures 1999, P45
(6) Rico-Lazarowski, A; Thromb Haemost 2001, V86(Suppl), PCD3185
(7) Roussi, J; Thromb Haemost 1994, V72, P698 HCAPLUS
(8) Tomenson, J; Thromboplastin Calibration and Oral Anticoagulant Control 1984, P87
(9) Tripodi, A; Thromb Haemost 1992, V67, P42 HCAPLUS
(10) Tripodi, A; Thromb Haemost 1995, V74, P1368 HCAPLUS
(11) Tripodi, A; Thromb Haemost 1998, V79, P439 HCAPLUS
(12) Valdes-Camin, R; Blood Coagul Fibrinolysis 1994, V5, P617 HCAPLUS
(13) van den Besselaar, A; Thromb Haemost 1993, V70, P794 HCAPLUS
(14) van den Besselaar, A; Thromb Haemost 1999, V81, P66 HCAPLUS
(15) van den Besselaar, A; Thromb Haemost 2000, V84, P664 HCAPLUS
(16) van den Besselaar, A; Thromb Haemost 2002, V88, P459 HCAPLUS
(17) WHO Expert Committee on Biological Standardization; WHO Techn Report Series 1999, V889, P64

L54 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:697159 HCAPLUS
DN 139:194022
ED Entered STN: 05 Sep 2003
TI Method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome
IN Toh, Cheng Hock; **Tejidor, Liliana**; Neisheim, Mike; Jones, Gregory
PA **Biomerieux**, Inc., USA
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-53
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 7, 14
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003073099	A1	20030904	WO 2003-US5980	20030227
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003228625	A1	20031211	US 2003-375251	20030227
	EP 1476752	A1	20041117	EP 2003-711279	20030227
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2005519267	T2	20050630	JP 2003-571735	20030227
PRAI	US 2002-359932P	P	20020227		
	US 2002-363073P	P	20020311		
	US 2002-396392P	P	20020717		
	US 2002-404652P	P	20020820		
	WO 2003-US5980	W	20030227		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003073099	ICM	G01N033-53
WO 2003073099	ECLA	G01N033/92
US 2003228625	NCL	435/007.100; 436/071.000

ECLA G01N033/92
JP 2005519267 FTERM 2G045/CA26; 2G045/DA62; 2G045/FA40; 2G045/FB01; 2G045/FB03; 2G045/FB06; 2G045/JA01; 4B063/QA01; 4B063/QA19; 4B063/QQ03; 4B063/QQ36; 4B063/QQ79; 4B063/QR41; 4B063/QR69; 4B063/QS12; 4B063/QS24; 4B063/QS36; 4B063/QX01; 4B063/QX02; 4C084/AA02; 4C084/AA03; 4C084/BA44; 4C084/CA62; 4C084/MA65; 4C084/NA14; 4C084/ZA312; 4C084/ZA532; 4C084/ZA542; 4C084/ZA892; 4C084/ZB052; 4C084/ZB112; 4C084/ZB332; 4C084/ZB352; 4C084/ZB382; 4C084/ZC202

AB A method for diagnosing and monitoring subjects for hemostatic dysfunction, severe infection and systematic inflammatory response syndrome is provided whereby lipoproteins are examined for abnormalities, particularly for prothrombinase enhancement, through quant. and qual. anal.

ST diagnosing monitoring hemostatic dysfunction severe infection systematic inflammatory syndrome

IT Lipoproteins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(Abnormal; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Apolipoproteins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(B; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(C-reactive; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Infection
(Severe; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Annexins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(V; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT **Blood coagulation**
(disorder; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT **Blood coagulation**
(disseminated intravascular; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(intermediate-d.; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(low-d.; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Binders
Blood analysis
Blood plasma
Blood serum
Chromatography
Diagnosis
Human
NMR spectroscopy
Samples

Sepsis
Surface area
Thrombus
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Inflammation
(systemic inflammatory response syndrome; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(very-low-d.; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT Lipoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(β-; method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT **9002-04-4, Thrombin**
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT **9035-58-9, Tissue factor** (blood-coagulation)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

IT 9001-26-7, Prothrombin **72162-96-0**, Prothrombinase
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Yu; US 20020150534 A1 2002 HCAPLUS

IT **9002-04-4, Thrombin**
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for diagnosing and monitoring hemostatic dysfunction, severe infection and systematic inflammatory response syndrome)

RN 9002-04-4 HCAPLUS
CN Thrombin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:435205 HCAPLUS
DN 139:19321
ED Entered STN: 06 Jun 2003
TI Method for predicting an increased likelihood of antiphospholipid syndrome in a patient using phospholipids and waveform analysis
IN Ortel, Thomas L.; Su, Zuowei; Braun, Paul J.; **Tejidor, Liliana**
PA USA
SO U.S. Pat. Appl. Publ., 47 pp.
CODEN: USXXCO

DT Patent
LA English
IC ICM G01N033-53
INCL 435007900
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 14, 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003104493	A1	20030605	US 2002-185186	20020628
	WO 2003083490	A2	20031009	WO 2002-US20618	20020628
	WO 2003083490	A3	20040415		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1436628	A2	20040714	EP 2002-806824	20020628
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2005520170	T2	20050707	JP 2003-580871	20020628
PRAI	US 2001-302261P	P	20010629		
	US 2001-318755P	P	20010911		
	WO 2002-US20618	W	20020628		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003104493	ICM	G01N033-53
	INCL	435007900
US 2003104493	NCL	435/007.900
	ECLA	G01N021/77; G01N033/557; G01N033/68B; G01N033/68V; G01N033/86; G01N033/92; G06F019/00A
WO 2003083490	ECLA	G01N021/77; G01N033/557; G01N033/68B; G01N033/68V; G01N033/86; G01N033/92; G06F019/00A
JP 2005520170	FTERM	4B063/QA01; 4B063/QA12; 4B063/QA19; 4B063/QQ03; 4B063/QQ43; 4B063/QQ44; 4B063/QR08; 4B063/QR42; 4B063/QR56; 4B063/QS25; 4B063/QS34; 4B063/QX02

AB A method for predicting that an individual has antiphospholipid syndrome or an increased likelihood of having antiphospholipid syndrome, includes: (a) providing a test sample from an individual; (b) combining the test sample with phospholipids; (c) directing a light beam at the test sample and monitoring light scattering or transmittance over time so as to provide a time-dependent measurement profile; (d) determining if a value or a slope at or over a particular time in the time-dependent measurement profile is beyond a corresponding predetd. value or slope threshold; and if the value or slope in the time-dependent measurement profile is beyond the predetd. threshold, then determining that the individual has antiphospholipid syndrome or an increased risk of antiphospholipid syndrome. The phospholipids can be provided as part of a coagulation reagent, or as part of a reagent where coagulation is not activated. Confirmatory assays for particular antibodies to phospholipid binding proteins can be performed.

ST antiphospholipid syndrome diagnosis phospholipid waveform analysis; antibodies phospholipid light scattering time profile

IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(C-reactive; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Apolipoproteins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

DGN (Diagnostic use); PUR (Purification or recovery); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(H, antibodies to, immunoassay for; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Antibodies and Immunoglobulins
RL: AMX (Analytical matrix); ANST (Analytical study)
(IgG; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Samples
(anal. of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Cardiolipins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antibodies to, immunoassay for; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Blood analysis
Human
Immunoassay
Light scattering
Liposomes
Optical transmission
Risk assessment
Time
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Antiphospholipid syndrome
RL: ADV (Adverse effect, including toxicity); ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Antibodies and Immunoglobulins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylcholines, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylethanolamines, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylinositols
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phosphatidylserines
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Phospholipids, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Analysis
Process automation
(automated anal., for thrombosis and hemostasis testing;

antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Algorithm
(automated; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Analysis
(clin., APTT assay; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Lipoproteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(complexes, with C-reactive protein; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Autoimmune disease
(determining increased likelihood of having; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT **Blood coagulation**
(disorder; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT **Blood coagulation**
(disseminated intravascular, patient not having; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Metals, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(divalent, reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Immunoassay
(enzyme-linked immunosorbent assay, confirmatory assay for antiphospholipid antibodies; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Immunoassay
(latex agglutination test, confirmatory assay for antiphospholipid antibodies; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Therapy
(monitoring; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Simulation and Modeling, physicochemical
(neural network; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Platelet (blood)
(neutralization test; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT **Anticoagulants**
(oral; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Proteins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(phospholipid-binding, antibodies to; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Cations
(phospholipids added in absence of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT **Coagulants**
(phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Reagents
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)

IT Spectrometers
(photooptical coagulation analyzers; antiphospholipid syndrome

diagnosis using phospholipids and waveform anal.)
IT **Thrombosis**
(predicting increased risk of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Daboia russelli
(reagent containing liposomes and venom of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Halides
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Mammalia
(reagents from tissue of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Animal tissue
Brain
Placenta
(reagents from; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Venoms
(snake, reagent containing liposomes and Russel's viper; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Abortion
(spontaneous; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Lupus erythematosus
(systemic, determining increased likelihood of having; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT Embolism
(thromboembolism; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT 163663-01-2, Innovin 229637-90-5, Simplastin L
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT 107-73-3, Phosphorylcholine
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(in determination of C-reactive protein; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT 535969-18-7
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagent containing liposomes and; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT **9035-58-9, Blood-coagulation factor III 72162-96-0, Thromboplastin**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT 9001-26-7, Prothrombin
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(time reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
IT 537732-37-9 537732-38-0 537732-39-1 537732-40-4
RL: PRP (Properties)
(unclaimed nucleotide sequence; method for predicting an increased likelihood of antiphospholipid syndrome in a patient using phospholipids and waveform anal.)
IT **9035-58-9, Blood-coagulation factor III**

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagent, phospholipids as part of; antiphospholipid syndrome diagnosis using phospholipids and waveform anal.)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:966970 HCAPLUS
DN 138:21824
ED Entered STN: 22 Dec 2002
TI Method for detecting a lipoprotein-acute phase protein complex and predicting an increased risk of system failure or mortality
IN **Fischer, Timothy J.**; Downey, Colin; Nesheim, Mike; Samis, John A.; **Tejidor, Liliana**; Toh, Cheng Hock; Walker, John B.
PA USA
SO U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U. S. Ser. No. 591,642, abandoned.
CODEN: USXXCO
DT Patent
LA English
IC ICM G01N031-00
INCL 702022000
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 14
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002193949	A1	20021219	US 2001-19087	20011219
	JP 11507131	T2	19990622	JP 1996-501365	19960605
	JP 3534415	B2	20040607	JP 1997-501365	19960605
	US 6101449	A	20000808	US 1997-859773	19970521
	US 6321164	B1	20011120	US 1997-1647	19971231
	EP 1522860	A1	20050413	EP 2004-25887	20000204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	US 2002019706	A1	20020214	US 2001-850255	20010507
	US 6564153	B2	20030513		
	WO 2001096864	A2	20011220	WO 2001-US18611	20010608
	WO 2001096864	A3	20030206		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	JP 2004503254	T2	20040205	JP 2002-510942	20010608
	US 2001053959	A1	20011220	US 2001-918214	20010730
	US 6898532	B1	20050524	US 2003-377228	20030228
	US 2004248308	A1	20041209	US 2004-884293	20040702
PRAI	US 1995-477839	A1	19950607		
	US 1997-859773	A2	19970521		
	US 1997-1647	A2	19971231		
	US 1999-244340	A2	19990204		
	US 2000-591642	B2	20000609		
	WO 2001-US18611	W	20010608		
	WO 1996-US8905	W	19960605		
	EP 2000-913371	A3	20000204		
	US 2000-517496	A1	20000302		
	US 2003-377228	A1	20030228		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002193949	ICM	G01N031-00
	INCL	702022000
US 2002193949	NCL	702/022.000
	ECLA	G01N033/86; G01N033/92
US 6101449	NCL	702/022.000; 702/028.000; 702/030.000; 702/032.000; 703/011.000
	ECLA	G06F019/00A2
US 6321164	NCL	702/022.000; 702/028.000; 702/030.000; 702/032.000; 703/011.000
	ECLA	G06F019/00A2
US 2002019706	NCL	702/022.000; 436/069.000; 702/019.000; 702/030.000; 702/032.000
	ECLA	G01N033/49B; G06F019/00A2
JP 2004503254	FTERM	2G045/AA25; 2G045/BA20; 2G045/CA26; 2G045/FA11; 2G045/FB01; 2G045/GC10; 2G045/GC12; 2G045/JA01; 4B063/QA01; 4B063/QA19; 4B063/QQ03; 4B063/QR01; 4B063/QR48; 4B063/QS26; 4B063/QS31; 4B063/QX01
US 2001053959	NCL	702/022.000
	ECLA	C07K016/18; G06F019/00A2
US 6898532	NCL	702/022.000; 702/019.000; 702/030.000; 702/032.000; 703/011.000
US 2004248308	NCL	436/069.000

AB A method for diagnosing a condition of a patient involves the steps of (a) adding one or more reagents to a test sample from a patient, the test samples comprising at least part of a blood sample from the patient, in order to cause formation of a complex comprising at least one acute phase protein at least one human lipoprotein, while causing substantially no fiber polymerization; (b) measuring the formation of the complex over time so as to derive a time-dependent measurement profile, and (c) determining a slope and/or total change in the time-dependent measurement profile, so as to diagnose a condition of the patient. A greater formation of the complex is correlated to increased probability of death of the patient.

ST lipoprotein acute phase protein complex predicting risk system

IT Proteins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(C-reactive; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(SAA (serum amyloid A); lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(high-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(intermediate-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Blood analysis
Blood coagulation
Chylomicrons
Complexation
Diagnosis
Human
Optical transmission
(lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Apolipoproteins
Fibrins
Lipoproteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study) (low-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study) (very-low-d.; lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT 60-00-4, EDTA, biological studies 68-04-2, Sodium citrate 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-39-3, Barium, biological studies 7440-70-2, Calcium, biological studies 8001-27-2, Hirudin 9000-94-6, Antithrombin 9005-49-6, Heparin, biological studies 71142-71-7, PPack **72162-96-0, Thromboplastin** 93050-91-0, I2581
RL: BSU (Biological study, unclassified); BIOL (Biological study) (lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

IT **72162-96-0, Thromboplastin**
RL: BSU (Biological study, unclassified); BIOL (Biological study) (lipoprotein-acute phase protein complex detection and predicting an increased risk of system failure or mortality)

RN 72162-96-0 HCAPLUS
CN Prothrombinase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:928029 HCAPLUS
DN 138:16613
ED Entered STN: 06 Dec 2002
TI Use of liposomes of defined composition and size for the preparation of prothrombin time reagents
IN Wang, Jianfang; Johnson, Kevin Bruce; **Tejidor, Liliana Maria**; Doobay, Hema
PA USA
SO U.S. Pat. Appl. Publ., 6 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM A01N037-18
ICS A61K038-00; A61K039-385; A61K009-127; A61K038-16; A61K035-14; C07K017-00; C07K016-00; C07K014-00; C07K001-00
INCL 424195110; 424450000; 514002000; 514012000; 530380000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 9, 14
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2002182225	A1	20021205	US 2001-815398	20010322
US 6596543	B2	20030722		
PRAI US 2001-815398		20010322		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002182225	ICM	A01N037-18
	ICS	A61K038-00; A61K039-385; A61K009-127; A61K038-16; A61K035-14; C07K017-00; C07K016-00; C07K014-00; C07K001-00
	INCL	424195110; 424450000; 514002000; 514012000; 530380000
US 2002182225	NCL	436/069.000; 424/001.210; 424/009.100; 424/009.321; 424/009.322; 424/450.000; 424/460.000; 530/381.000
	ECLA	A61K009/127

AB The present invention relates generally to the field of prothrombin time reagents for determining dysfunction in the coagulation system and more specifically to reagents made from native **thromboplastin** or purified or recombinant **tissue factor** and phospholipids from a natural or synthetic source. The present invention relates to methods to make a diagnostic reagent that includes a membrane-bound protein incorporated into a liposome and having addnl. empty liposomes (liposomes without membrane-bound protein incorporated therein) added to the solution

ST prothrombin time reagent prepn liposome

IT Diagnosis
(agents; use of liposomes of defined composition and size for the preparation of prothrombin time reagents)

IT Liposomes
(use of liposomes of defined composition and size for the preparation of prothrombin time reagents)

IT Phospholipids, biological studies
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(use of liposomes of defined composition and size for the preparation of prothrombin time reagents)

IT 9001-26-7, Prothrombin
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(time reagents; use of liposomes of defined composition and size for the preparation of prothrombin time reagents)

IT **9035-58-9, Blood-coagulation factor III** 72162-96-0, **Thromboplastin**
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(use of liposomes of defined composition and size for the preparation of prothrombin time reagents)

IT **9035-58-9, Blood-coagulation factor III**
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(use of liposomes of defined composition and size for the preparation of prothrombin time reagents)

RN 9035-58-9 HCAPLUS

CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:553781 HCAPLUS

DN 133:132103

ED Entered STN: 11 Aug 2000

TI A method and apparatus for predicting the presence of hemostatic dysfunction in a patient sample

IN Toh, Cheng Hock; Downey, Colin; **Fischer, Timothy J.**

PA **Akzo Nobel** N.V., Neth.

SO PCT Int. Appl., 111 pp.
CODEN: PIXXD2

DT Patent

LA English

IC ICM G01N033-86

CC 9-1 (Biochemical Methods)
Section cross-reference(s): 14

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000046603	A1	20000810	WO 2000-US2987	20000204
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2362055	AA	20000810	CA 2000-2362055	20000204
	EP 1147423	A1	20011024	EP 2000-913371	20000204
	EP 1147423	B1	20041110		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

	JP 2002541431	T2	20021203	JP 2000-597634	20000204
	AU 774889	B2	20040708	AU 2000-34833	20000204
	AU 2000034833	A5	20000825		
	AT 282208	E	20041115	AT 2000-913371	20000204
	EP 1522860	A1	20050413	EP 2004-25887	20000204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	ES 2231167	T3	20050516	ES 2000-913371	20000204
	US 2004248308	A1	20041209	US 2004-884293	20040702
PRAI	US 1999-244340	A	19990204		
	EP 2000-913371	A3	20000204		
	WO 2000-US2987	W	20000204		
	US 2003-377228	A1	20030228		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000046603	ICM	G01N033-86
US 2004248308	NCL	436/069.000

AB A method is disclosed for predicting the presence of hemostatic dysfunction. At least one time-dependent measurement on an unknown sample is performed and a resp. property of the sample is measured over time so as to derive a time-dependent measurement profile. One or more predictor variables, including initial slope, are defined which sufficiently define the data of the time-dependent measurement profile. A model is then derived that represents the relationship between an abnormality and a set of predictor variables. Subsequently, the model is utilized to predict hemostatic dysfunction.

ST app hemostatic dysfunction

IT Fibrinogen degradation products
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(DD; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Acidosis
Apparatus
Blood analysis
Blood coagulation
Blood plasma
Diagnosis
Disease, animal
Hypoxia, animal
Infection
Liver, disease
Neoplasm
Parturition
Platelet (blood)
Pregnancy
Spectroscopy
Surgery
Therapy
Thrombus
Transplant rejection
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Fibrinogens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Artery
(aorta, aneurysm rupture; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT **Blood coagulation**
(disseminated intravascular; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Hemostatics
(dysfunction; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)

IT Inflammation
(systemic inflammatory response syndrome; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)
IT Injury
(trauma; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)
IT 9001-26-7, Prothrombin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient)
IT **72162-96-0, Thromboplastin**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)
IT 7439-93-2, Lithium, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(overdose; a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Astion; Arch Pathol Lab Med 1992, V116, P995 MEDLINE
(2) Givens; US 5708591 A 1998
(3) Hoffman; Organon Teknika 1990, P3 MEDLINE
(4) Pohl; Haemostasis 1994, V24, P325 MEDLINE
IT **72162-96-0, Thromboplastin**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a method and apparatus for predicting presence of hemostatic dysfunction in a patient sample)
RN 72162-96-0 HCAPLUS
CN Prothrombinase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:368697 HCAPLUS
DN 132:345127
ED Entered STN: 04 Jun 2000
TI Devices and methods for performing blood coagulation assays by piezoelectric sensing
IN Wu, Jogin R.; Moreno, Mario
PA **Akzo Nobel** N.V., Neth.
SO PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-00
CC 9-1 (Biochemical Methods)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000031529	A1	20000602	WO 1999-US27287	19991117
	WO 2000031529	C2	20021107		
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6200532	B1	20010313	US 1998-197481	19981120
	EP 1141699	A1	20011010	EP 1999-960444	19991117
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1998-197481	A1	19981120		
	WO 1999-US27287	W	19991117		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000031529	ICM	G01N033-00
WO 2000031529	ECLA	G01N027/00B1B; G01N033/49B

US 6200532 NCL 422/073.000; 073/064.410; 073/064.420; 073/064.430; 436/069.000
ECLA G01N027/00B1B; G01N033/49B

AB A device and method for performing blood coagulation assays, particularly prothrombin times and activated partial **thromboplastin** times and other clotting parameters are disclosed. The device comprises a disposable strip (figures 1, 2 and 4) (containing a sample inlet (8) for sample delivery, a capillary channel for driving force, and a reaction chamber (1) with an appropriate dry reagent for a specific assay) and a piezoelec. sensor (3). The device could also include a heating element for temperature control, and a magnetic bender (2). The magnetic bender is driven by an electromagnetic field generator (6) and is attached onto a piezoelec. film (3) in contact with the blood sample. An elec. signal generated at the piezo film is characterized by its frequency and amplitude due to the movement of the attached metal film. The signal collected at the site of the film represents the process of a biochem. reaction in the reaction chamber, while the blood sample proceeds to the point at which clot formation starts.

ST blood coagulation assay piezoelec sensor

IT Membranes, nonbiological
(asym.; devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT Blood analysis
Blood coagulation
Capillary tubes
Energy transfer
Filters
Heaters
IR sources
Interferometry
Mirrors
Piezoelectric sensors
(devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT Reagents
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT Fluoropolymers, uses
RL: DEV (Device component use); USES (Uses)
(devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT Lenses
(focusing; devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT Polymers, uses
RL: DEV (Device component use); USES (Uses)
(polysulfonates, asym. membrane of; devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT 9002-05-5, **Thromboplastin**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(activated partial **thromboplastin** time; devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT 12047-27-7, Barium Titanium oxide, uses 12626-81-2, Lead-zirconate-titanate 24937-79-9, Polyvinylidene fluoride 37349-19-2, Lead-magnesium-niobate
RL: DEV (Device component use); USES (Uses)
(devices and methods for performing blood coagulation assays by piezoelec. sensing)

IT 9001-26-7, Prothrombin
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(time; devices and methods for performing blood coagulation assays by piezoelec. sensing)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Meller; US 5892144 A 1999 HCAPLUS
(2) Siegal; US 4450375 A 1984
(3) Siegal; US 4629926 A 1986

L54 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:464135 HCAPLUS
DN 131:85163
ED Entered STN: 29 Jul 1999
TI A method for predicting an abnormal level of clotting proteins using neural network simulation
IN Braun, Paul; Givens, Thomas B.; **Fischer, Timothy J.**
PA **Akzo Nobel** N.V., Neth.
SO PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DT Patent
LA English
IC G01N033-49; G01N033-86; G06F019-00
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 7, 14
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9934208	A1	19990708	WO 1998-US27865	19981230
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 11507131	T2	19990622	JP 1996-501365	19960605
	JP 3534415	B2	20040607	JP 1997-501365	19960605
	US 6321164	B1	20011120	US 1997-1647	19971231
	CA 2316361	AA	19990708	CA 1998-2316361	19981230
	AU 9919503	A1	19990719	AU 1999-19503	19981230
	EP 1042669	A1	20001011	EP 1998-964342	19981230
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002500360	T2	20020108	JP 2000-526808	19981230
	US 2001053959	A1	20011220	US 2001-918214	20010730
PRAI	US 1995-477839	A	19950607		
	US 1997-1647	A2	19971231		
	WO 1996-US8905	W	19960605		
	US 1997-859773	A2	19970521		
	WO 1998-US27865	W	19981230		
	US 2000-517496	A1	20000302		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9934208	IC	G01N033-49IC G01N033-86IC G06F019-00
WO 9934208	ECLA	G01N033/49B
US 6321164	NCL	702/022.000; 702/028.000; 702/030.000; 702/032.000; 703/011.000
	ECLA	G06F019/00A2
US 2001053959	NCL	702/022.000
	ECLA	C07K016/18; G06F019/00A2

AB A method is disclosed for predicting the presence of an abnormal level of one or more proteins in the clotting cascade from at least one time-dependent measurement profile. At least one time-dependent measurement on an unknown sample is performed and a resp. property of the sample is measured over time so as to derive a time-dependent measurement profile. A set of a plurality of predictor variables are defined which sufficiently define the data of the time-dependent measurement profile. A model is then derived that represents the relationship between the abnormality and the set of predictor variables. Subsequently, the model is utilized to predict which protein or proteins in the clotting cascade are at an abnormal level, with the prediction being a better prediction than clot time alone. Neural networks using self-organizing feature maps

and learning vector quantization were used to analyze optical data from clin. coagulation tests. Self-organizing feature maps using an unsupervised learning algorithm were trained with data from normal donors, patients with abnormal levels of coagulation proteins and patients undergoing anticoagulant therapy. Specimen categories were distinguishable in these maps with varying levels of resolution A supervised neural network method, learning vector quantization, was used to train maps to classify coagulation data. These networks showed sensitivity greater than 0.6 and specificity greater than 0.85 for detection of several factor deficiencies and heparin.

ST clotting protein abnormality prediction neural network simulation; blood coagulation factor abnormality prediction

IT Proteins, specific or class
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(clotting; predicting abnormal level of clotting proteins using neural network simulation)

IT Blood
(disease, congenital or acquired; predicting abnormal level of clotting proteins using neural network simulation)

IT **Blood coagulation**
(extrinsic; predicting abnormal level of clotting proteins using neural network simulation)

IT **Blood coagulation**
(intrinsic; predicting abnormal level of clotting proteins using neural network simulation)

IT Simulation and Modeling, biological
(neural network; predicting abnormal level of clotting proteins using neural network simulation)

IT **Anticoagulants**
(oral, in known blood samples; predicting abnormal level of clotting proteins using neural network simulation)

IT Blood analysis
Blood coagulation
Simulation and Modeling, biological
Therapy
Thrombosis
(predicting abnormal level of clotting proteins using neural network simulation)

IT Fibrinogens
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(reagents; predicting abnormal level of clotting proteins using neural network simulation)

IT **72162-96-0, Thromboplastin**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(APTT reagents; predicting abnormal level of clotting proteins using neural network simulation)

IT **9002-04-4, Thrombin**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(TT reagents; predicting abnormal level of clotting proteins using neural network simulation)

IT 9005-49-6, Heparin, analysis
RL: ANT (Analyte); ARU (Analytical role, unclassified); ANST (Analytical study)
(in known blood samples; predicting abnormal level of clotting proteins using neural network simulation)

IT 9001-24-5, Blood coagulation factor V 9001-25-6, Blood coagulation factor VII 9001-26-7, Blood coagulation **factor II**
9001-27-8, Blood coagulation factor VIII 9001-28-9, Blood coagulation factor IX 9001-29-0, Blood coagulation factor X 9001-30-3, Blood coagulation factor XII 9013-55-2, Blood coagulation factor XI
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(predicting abnormal level of clotting proteins using neural network simulation)
IT 229637-90-5, Simplastin L 229638-70-4, Platelin L
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(predicting abnormal level of clotting proteins using neural network simulation)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Fischer; 1997
(2) Givens; 1998
(3) Grossman; 1992
IT **72162-96-0, Thromboplastin**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(APTT reagents; predicting abnormal level of clotting proteins using neural network simulation)
RN 72162-96-0 HCAPLUS
CN Prothrombinase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:354324 HCAPLUS
DN 130:349368
ED Entered STN: 09 Jun 1999
TI Blood coagulation monitoring device with liquid crystal and gradient heater
IN Moreno, Mario; Wu, Jogin R.
PA **Akzo Nobel** N.V., Neth.
SO U.S., 17 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM G01N033-86
INCL 436069000
CC 9-1 (Biochemical Methods)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5908786	A	19990601	US 1997-989561	19971212
	WO 9930166	A1	19990617	WO 1998-US26453	19981211
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9918211	A1	19990628	AU 1999-18211	19981211
PRAI	US 1997-989561	A1	19971212		
	WO 1998-US26453	W	19981211		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5908786	ICM	G01N033-86
	INCL	436069000
US 5908786	NCL	436/069.000; 073/064.410; 073/064.430; 422/055.000; 422/058.000; 422/073.000; 422/101.000; 422/102.000; 436/164.000; 436/165.000; 436/177.000; 436/178.000
	ECLA	G01N033/86
WO 9930166	ECLA	G01N033/86

AB A device and method are disclosed for determining whether or not an individual's blood coagulation time is in a normal or abnormal range, and is particularly suitable for measuring prothrombin time and activated partial **thromboplastin** time coagulation values. The device includes a housing with an area for receiving a sample, a capillary channel or elongated area with an absorbent material, and a gradient heater. Liquid crystal and a coagulation agent can be disposed within the device to mix with a sample added to the device. The mixture passes along the capillary

channel or absorbent material and stops moving when the sample has clotted. Due to the gradient heater and liquid crystal, the mixture may or may not change color, depending upon whether the individual has an abnormally short, normal, or abnormally long clot time.

ST blood coagulation time analyzer liq crystal; gradient heater blood coagulation time analyzer

IT Phospholipids, biological studies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(blood clotting reagent; blood coagulation monitoring device with liquid crystal and gradient heater)

IT Analytical apparatus
Blood analysis
Blood coagulation
Liquid crystals
Membrane filters
(blood coagulation monitoring device with liquid crystal and gradient heater)

IT Reagents
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(blood coagulation monitoring device with liquid crystal and gradient heater)

IT Capillary tubes
(channels; blood coagulation monitoring device with liquid crystal and gradient heater)

IT Electric heaters
(gradient heaters; blood coagulation monitoring device with liquid crystal and gradient heater)

IT Heaters
(gradient; blood coagulation monitoring device with liquid crystal and gradient heater)

IT **72162-96-0, Thromboplastin**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(blood clotting reagent; blood coagulation monitoring device with liquid crystal and gradient heater)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Burgess, D; IEEE/IRPS 1984
(2) Cusak; US 5302348 1994
(3) Cusak; US 5372946 1994
(4) Davis; US 5058999 1991
(5) Dribbon; US 5678566 1997
(6) Fleuren, E; IEEE/IRPS 1983
(7) Gavin; US 5534226 1996 HCAPLUS
(8) Hillman; US 4963498 1990 HCAPLUS
(9) Hillman; US 5140161 1992 HCAPLUS
(10) Hillman; US 5144139 1992 HCAPLUS
(11) Hillman; US 5164598 1992 HCAPLUS
(12) Hillman; US 5204525 1993 HCAPLUS
(13) Hillman; US 5300779 1994 HCAPLUS
(14) Oberhardt; US 4849340 1989 HCAPLUS
(15) Phillips; US 5135549 1992 HCAPLUS

IT **72162-96-0, Thromboplastin**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(blood clotting reagent; blood coagulation monitoring device with liquid crystal and gradient heater)

RN 72162-96-0 HCAPLUS

CN Prothrombinase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:745086 HCAPLUS

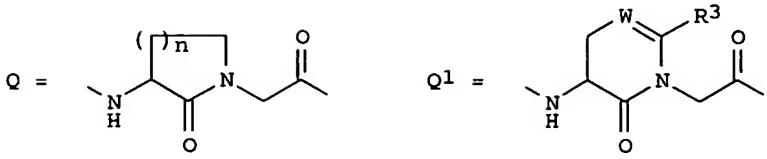
DN 130:4091
ED Entered STN: 24 Nov 1998
TI Preparation of backbone-cyclized peptide derivatives as serine protease and thrombin inhibitors
IN Adang, Anton Egbert Peter
PA Akzo Nobel N.V., Neth.
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K005-00
ICS C07K005-08; A61K038-05
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 7
FAN.CNT 1

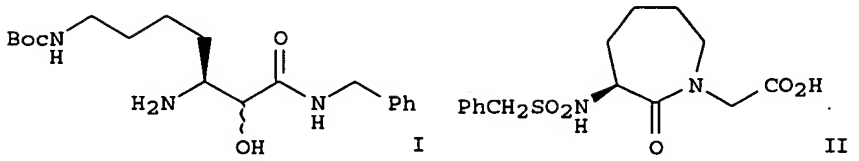
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9850420	A1	19981112	WO 1998-EP2587	19980428
	W: AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, ID, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2287569	AA	19981112	CA 1998-2287569	19980428
	AU 9876520	A1	19981127	AU 1998-76520	19980428
	AU 729910	B2	20010215		
	EP 979240	A1	20000216	EP 1998-924265	19980428
	EP 979240	B1	20040414		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9809342	A	20000704	BR 1998-9342	19980428
	TR 9902692	T2	20000721	TR 1999-9902692	19980428
	NZ 500620	A	20001027	NZ 1998-500620	19980428
	JP 2001524117	T2	20011127	JP 1998-547715	19980428
	RU 2183642	C2	20020620	RU 1999-125967	19980428
	AT 264339	E	20040415	AT 1998-924265	19980428
	PT 979240	T	20040831	PT 1998-924265	19980428
	ES 2218827	T3	20041116	ES 1998-924265	19980428
	ZA 9803629	A	19981104	ZA 1998-3629	19980429
	US 6534495	B1	20030318	US 1999-403856	19991026
	NO 9905316	A	19991101	NO 1999-5316	19991101
	MX 9910057	A	20000731	MX 1999-10057	19991101
PRAI	EP 1997-201286	A	19970502		
	WO 1998-EP2587	W	19980428		

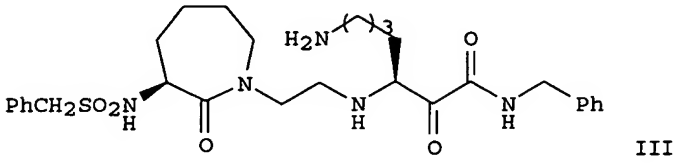
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9850420	ICM	C07K005-00
	ICS	C07K005-08; A61K038-05
WO 9850420	ECLA	C07K005/02A
US 6534495	NCL	514/212.030; 514/212.080; 514/309.000; 514/349.000; 514/550.000; 540/524.000; 540/527.000; 546/141.000; 546/297.000; 560/013.000; 560/150.000
	ECLA	C07K005/02A

OS MARPAT 130:4091
GI







AB The invention relates peptide derivs. R1SO2-B-X-Z-CO-Y [B = bond, amino acid NHCH[(CH2)pCO2H]CO or ester derivative thereof, Gly, D-1-perhydroiosquinolinecarboxylic acid (D-1-Piq), D-3-Piq, D-1,2,3,4-tetrahydroisoquinoline-1-carboxylic acid (D-1-Tiq), D-3-Tiq, D-aminotetralincarboxylic acid, aminoindanecarboxylic acid, L- or D-amino acid containing hydrophobic, basic, or neutral side chain; X = amino acid containing hydrophobic side chain, Gln, Ser, Thr, 2-aminoisobutyric acid, NR2CH2CO, Q, Q1, cyclic amino acid optionally containing addnl. heteroatom N, O or S, (un)substituted with C1-6 alkyl, C1-6 alkoxy, PhCH2O, oxo; Z = Lys, 4-aminocyclohexylglycine; Y = (un)substituted NHC1-6 alkylene-Ph, OR4, NR5R6; W = CH, N; R1 = R2O2C(CHR2)m, R2NH(CHR2)m, (un)substituted C1-12 alkyl, C2-12 alkenyl, C6-14 aryl, C7-15 aralkyl, C8-16 aralkenyl; each R2 = independently H, C1-12 alkyl, C3-8 cycloalkyl, (un)substituted C6-14 aryl or C7-15 aralkyl; R3 = H, C1-6alkyl, Ph optionally substituted with OH, C1-6 alkoxy, CO2H, CO2-C1-6 alkyl, CONH2, halo; R4 = H, C2-6 alkyl, CH2Ph; R5, R6 = independently H, C1-6 alkoxy, (un)substituted C1-6 alkyl; R5R6 = CH2CH2VCH2CH2; V = O, S, SO2; m = 1-3; n = 2-4; p = 1-3]. The compds. of the invention have anticoagulant activity and can be used in treating or preventing **thrombin**-related diseases. Thus, coupling of homologated Lys derivative I (prepared in 6 steps from Cbz-Lys(Boc)-OH, NaCN, and benzylamine) with backbone-cyclized dipeptide derivative II (prepared in 4 steps from L-α-amino-ε-caprolactam, Me bromoacetate, and benzylsulfonyl chloride), followed by oxidation and deprotection gave desired title compound III. **III** inhibited **factor** Xa with IC50 = 0.64 μM.

ST backbone cyclized peptide deriv prepn **thrombin** inhibitor; antithrombotic backbone cyclized peptide deriv prepn; anticoagulant backbone cyclized peptide deriv prepn; serine protease inhibitor backbone cyclized peptide deriv prepn

IT **Anticoagulants**
Anticoagulants
(Preparation of backbone-cyclized peptide derivs. as serine protease and **thrombin** inhibitors)

IT Peptides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cyclic; Preparation of backbone-cyclized peptide derivs. as serine protease

and **thrombin** inhibitors)

IT **9002-04-4, Thrombin** 9002-05-5, Factor Xa 65312-43-8, Factor VIIa
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Preparation of backbone-cyclized peptide derivs. as serine protease and **thrombin** inhibitors)

IT 37259-58-8, Serine protease
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(Preparation of backbone-cyclized peptide derivs. as serine protease and **thrombin** inhibitors)

IT **9035-58-9, Blood-coagulation factor III**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(human; Preparation of backbone-cyclized peptide derivs. as serine protease and **thrombin** inhibitors)

IT 215790-96-8P 215790-97-9P 215790-98-0P 215790-99-1P 215791-00-7P
215791-01-8P 215791-03-0P 215791-04-1P 215791-05-2P 215791-06-3P
215791-07-4P 215791-08-5P 215791-09-6P 215791-10-9P 215791-11-0P
215791-12-1P 215791-13-2P 215791-15-4P 215791-16-5P 215791-17-6P
215791-18-7P 215791-19-8P 215791-21-2P 215791-24-5P 215791-25-6P
215791-26-7P 215791-28-9P 215791-29-0P 215791-30-3P 215791-31-4P
215791-32-5P 215791-34-7P 215791-35-8P 215791-36-9P 215791-37-0P
215791-38-1P 215791-40-5P 215791-41-6P 215791-42-7P 215791-44-9P
215791-46-1P 215791-47-2P 215791-49-4P 215791-50-7P 215791-52-9P
215791-54-1P 215791-56-3P 215791-57-4P 215791-58-5P 215791-60-9P
215791-61-0P 215791-62-1P 215791-63-2P 215791-65-4P 215791-67-6P
215791-68-7P 215791-70-1P 215791-72-3P 215791-74-5P 215791-75-6P
215791-76-7P 215791-77-8P 215791-78-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of backbone-cyclized peptide derivs. as serine protease inhibitors)

IT 96-32-2, Methyl bromoacetate 98-09-9, Benzenesulfonyl chloride
110-91-8, Morpholine, reactions 123-75-1, Pyrrolidine, reactions
123-90-0, Thiomorpholine 594-44-5, Ethanesulfonyl chloride 1939-99-7, Benzylsulfonyl chloride 2386-60-9, Butanesulfonyl chloride 2389-60-8, Z-Lys(Boc)-OH 7517-19-3, Leucine methyl ester hydrochloride
10147-36-1, Propanesulfonyl chloride 10147-37-2, Isopropylsulfonyl chloride 21568-87-6, L-α-Amino-ε-caprolactam 39262-22-1, (-)-10-Camphorsulfonyl chloride 51077-14-6, N-tert-Butoxycarbonyl-L-azetidine-2-carboxylic acid 92455-59-9 179523-53-6 179523-60-5
186885-74-5 195722-71-5 201354-26-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of backbone-cyclized peptide derivs. as serine protease inhibitors)

IT 2389-49-3P 76944-95-1P 82611-52-7P 95582-17-5P 172348-42-4P
172348-46-8P 174960-80-6P 174960-81-7P 174960-90-8P 190905-65-8P
190905-68-1P 194985-26-7P 194985-27-8P 194985-37-0P 204267-17-4P
214153-20-5P 215791-80-3P 215791-81-4P 215791-82-5P 215791-83-6P
215791-85-8P 215791-86-9P 215791-88-1P 215791-89-2P 215791-90-5P
215791-92-7P 215791-94-9P 215791-95-0P 215791-96-1P 215791-97-2P
215791-99-4P 215792-00-0P 215792-01-1P 215792-02-2P 215792-03-3P
215792-04-4P 215792-05-5P 215792-06-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of backbone-cyclized peptide derivs. as serine protease inhibitors)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Cor Therapeutics Inc; WO 9640743 A 1996 HCAPLUS

(2) Jones, D; JOURNAL OF ENZYME INHIBITION 1995, V9, P43 HCAPLUS

IT **9002-04-4, Thrombin**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Preparation of backbone-cyclized peptide derivs. as serine protease and **thrombin** inhibitors)
RN 9002-04-4 HCAPLUS
CN Thrombin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:682605 HCAPLUS
DN 129:299887
ED Entered STN: 28 Oct 1998
TI Method and apparatus for optimizing assay sequencing on a random access clinical laboratory instrument so as to reduce reagent cross-contamination problems
IN Givens, Thomas B.; Hunley, Charles W.; **Fischer, Timothy J.**; Bowling, Regina J.
PA **Akzo Nobel** N.V., Neth.
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N001-36
ICS G01N035-00
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 7, 47
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9845679	A1	19981015	WO 1998-US7246	19980407
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9868983	A1	19981030	AU 1998-68983	19980407
PRAI US 1997-841983	A2	19970408		
WO 1998-US7246	W	19980407		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9845679	ICM	G01N001-36
	ICS	G01N035-00
WO 9845679	ECLA	G01N035/00

AB A method and apparatus are disclosed for optimizing the sequence of assays on an automated random access instrument so as to reduce reagent cross-contamination problems. A common vehicle for reagent cross-contamination is the reagent probe surface which transfers reagents for the various tests. When a plurality of assays are run on a single sample, an initial best path (order of assays) is identified, after which the iterative process of looking for a better alternative begins. This process involves the application of a knowledge base concerning relationships associated with random access cross-contamination, to search the state space. The search strategy for optimizing the steps involved in performing three assays (activated partial **thromboplastin** time, prothrombin time, and heparin) on an automated analyzer is shown.
ST clin analyzer assay optimization cross contamination; blood coagulation automated assay optimization
IT **Blood coagulation**
Coagulation
(assays; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
IT Analytical apparatus
(automated; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT Fibrinogens
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
IT Computer application
(expert systems; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
IT Blood analysis
(method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
IT 9002-05-5, **Thromboplastin**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(activated partial time coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
IT 9005-49-6, Heparin, analysis
RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(anti-Xa coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
IT 9000-94-6, Antithrombin III 9001-91-6, Plasminogen 60202-16-6, Protein C
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
IT 9001-26-7, Prothrombin **9002-04-4, Thrombin**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(time coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Coville; US 4695430 A 1987
(2) Manabe; US 4971913 A 1990
(3) Mimura; US 5100622 A 1992
(4) Zakowski; US 4908320 A 1990
IT **9002-04-4, Thrombin**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(time coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)
RN 9002-04-4 HCAPLUS
CN Thrombin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:494144 HCAPLUS
DN 129:126968
ED Entered STN: 07 Aug 1998
TI A randomized trial of solvent/detergent and standard fresh frozen plasma in the treatment of the coagulopathy seen during orthotopic liver transplantation
AU Freeman, Jonathan W.; Williamson, L. M.; Llewelyn, C.; Fisher, N.; Allain, J. P.; Bellamy, M.; **Baglin, T. P.**; Klinc, J.; Ala, F. A.; Smith,

N.; Neuberger, J.; Wreghitt, T.
CS Queen Elizabeth Hospital, Birmingham, B15 2TH, UK
SO Vox Sanguinis (1998), 74(Suppl.1), 225-229
CODEN: VOSAAD; ISSN: 0042-9007
PB S. Karger AG
DT Journal
LA English
CC 63-2 (Pharmaceuticals)
Section cross-reference(s): 15
AB The clin. effectiveness of solvent/detergent treated pooled fresh frozen blood plasma (SDFFP) was assessed in the correction of the coagulopathy seen during Orthotopic Liver Transplantation (OLT) as compared with standard FFP. Patients with an underlying derangement of coagulation and who were due to undergo OLT were randomized to receive either FFP or SDFFP. They were assessed for side effects, correction of coagulopathy, and seroconversion for viral markers. Patients undergoing OLT showed equal correction of clotting factors and partial **thromboplastin** time (PTT) when treated with FFP or SDFFP. There was also a similar time course to return to baseline values in each group. There was no difference in correction of INR in either group. Usage of other blood components during the operation was identical in the 2 groups. No seroconversions were seen for HIV, HBC, or HCV. Thus, SDFFP is an efficacious and safe source of coagulation factors for patients with liver disease undergoing Orthotopic Liver Transplantation. No adverse effects were seen during its administration.
ST coagulation factor blood serum solvent detergent
IT Antibodies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(antibodies against HAV and parvovirus B19 in blood of patients given solvent/detergent and standard fresh frozen blood plasma)
IT Blood serum
Fibrinolysis
(solvent/detergent and standard fresh frozen blood plasma in the treatment of the coagulopathy during liver transplantation)
IT Blood-coagulation factors
Fibrinogens
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(solvent/detergent and standard fresh frozen blood plasma in the treatment of the coagulopathy during liver transplantation)
IT 9001-24-5, Blood-coagulation factor V 9001-25-6, Blood-coagulation factor VII 9001-26-7, **Factor II** 9001-27-8, Factor VIII 60202-16-6, Protein C
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(solvent/detergent and standard fresh frozen blood plasma in the treatment of the coagulopathy during liver transplantation)

L54 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:603023 HCAPLUS
DN 127:246047
ED Entered STN: 22 Sep 1997
TI Properties of optical data from activated partial **thromboplastin** time and prothrombin time assays
AU Braun, Paul J.; Givens, Thomas B.; Stead, Andrew G.; Beck, Lisa R.; Gooch, Sheila A.; Swan, Robert J.; **Fischer, Timothy J.**
CS Organon Teknika Corporation, Durham, NC, 27712, USA
SO Thrombosis and Haemostasis (1997), 78(3), 1079-1087
CODEN: THHADQ; ISSN: 0340-6245
PB Schattauer
DT Journal
LA English
CC 13-5 (Mammalian Biochemistry)

Section cross-reference(s): 9
AB Changes in characteristics of optical transmittance data from coagulation assays were examined as a function of concentration of coagulation proteins or anticoagulants. Transmittance data were collected for activated partial **thromboplastin** time (APTT) and prothrombin time (PT) assays from: 1) plasmas prepared by mixing normal plasmas with deficient plasmas to give varying levels of coagulation proteins; 2) plasmas containing added heparin; and 3) 200 specimen plasmas that were also assayed for fibrinogen, coagulation factors, and other components. Optical profiles were characterized using a set of parameters describing onset and completion of coagulation, magnitude of signal change, rate of coagulation and other properties. Results indicated that parameters other than those typically reported for APTT and PT are associated with individual deficiencies, but that diagnosis of specimen status on the basis of optical data is complex. These results suggest possibilities for expanded interpretation of PT/APTT optical data for clin. or research applications.
ST blood anticoagulant thrombosis coagulation factor spectroscopy
IT **Anticoagulants**
Blood analysis
Blood coagulation
(optical data from activated partial **thromboplastin** time and prothrombin time assays)
IT Blood-coagulation factors
Fibrinogens
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(optical data from activated partial **thromboplastin** time and prothrombin time assays)
IT 9000-94-6, Antithrombin 9001-24-5, Blood-coagulation factor V 9001-25-6, Blood-coagulation factor VII 9001-26-7, Prothrombin 9001-27-8, Factor VIII 9001-28-9, Factor IX 9001-29-0, Factor X 9001-30-3, Blood-coagulation factor XII 9002-05-5, **Thromboplastin** 9013-55-2, Blood-coagulation factor XI **9035-58-9, Thromboplastin** 72162-96-0, **Thromboplastin**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(optical data from activated partial **thromboplastin** time and prothrombin time assays)
IT **9035-58-9, Thromboplastin**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(optical data from activated partial **thromboplastin** time and prothrombin time assays)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:276386 HCAPLUS
DN 124:332339
ED Entered STN: 11 May 1996
TI Low-molecular-weight heparins and new strategies for the treatment of patients with established venous thrombosis
AU **Baglin, T. P.**
CS Department Haematology, Cambridge, CB2 2QQ, UK
SO Haemostasis (1996), 26(Suppl. 2), 10-15
CODEN: HMTSB7; ISSN: 0301-0147
PB Karger
DT Journal
LA English
CC 1-8 (Pharmacology)
AB Unfractionated heparin is the commonest treatment for established venous thromboembolism. While this treatment undoubtedly reduces mortality and morbidity there are problems associated with its use. It does not always

prevent thrombus propagation or embolization, the low bioavailability results in a frequent failure to achieve therapeutic heparin levels in vivo and the variable sensitivity of the partial **thromboplastin** time to the heparin effect may result in inappropriate heparin dosage. The low-mol.-weight heparins have high predictable bioavailability and can be administered as weight-calculated fixed-dose regimens for the treatment of established venous thromboembolism. While statistically significant clin. results are awaited, there is increasing evidence for the superior benefit-risk ratios for these agents compared to unfractionated heparin. In routine practice, the frequent failure to achieve a therapeutic intensity of anticoagulation is currently the main reason for adopting low-mol.-weight heparins for first-line treatment of venous thromboembolism. Cost anal. studies based on total health care costs may support the use of these drugs, because savings from the abolishment of laboratory monitoring, improved clin. outcome and shorter inpatient stay may prove treatment with low-mol. weight heparin to be more cost-effective than treatment with unfractionated heparin.

ST heparin antithrombotic

IT **Anticoagulants and Antithrombotics**
(low-mol.-weight heparins and new strategies for the treatment of human patients with established venous thrombosis)

IT **Thrombosis**
(venous, low-mol.-weight heparins and new strategies for the treatment of human patients with established venous thrombosis)

IT 9005-49-6, Heparin, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(low-mol.-weight heparins and new strategies for the treatment of human patients with established venous thrombosis)

L54 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:625709 HCAPLUS
DN 121:225709
ED Entered STN: 12 Nov 1994
TI Properties of a new **thromboplastin** reagent based on recombinant **tissue factor** and synthetic phospholipids
AU Kolde, Hans Juergen; Hawkins, P.; **Tejidor, L.**; Denzler, B.; Ramirez, I.
CS Baxter Diagn., Unterschleissheim, D-85716, Germany
SO Klinisches Labor (1993), 39(10), 767-76
CODEN: KLLAEA; ISSN: 0941-2131
DT Journal
LA English
CC 9-15 (Biochemical Methods)
Section cross-reference(s): 13, 63
AB The influence of various phospholipids on the relipidation process of the apoprotein and their influence on the properties of the title-reagent Innovin (I) is described. I does not tend to sediment and is less sensitive to heparin. I shows similar results as BCT. In the future, it will replace conventional **thromboplastins** to give an improvement of quality.
ST **tissue factor** phospholipid coagulation **thromboplastin** innovin
IT Phospholipids, biological studies
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(properties of **thromboplastin** reagent based on recombinant **tissue factor** and synthetic phospholipids)
IT **9035-58-9, Blood-coagulation factor III**
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(properties of **thromboplastin** reagent based on recombinant **tissue factor** and synthetic phospholipids)
IT **9035-58-9, Blood-coagulation factor**

III
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(properties of **thromboplastin** reagent based on recombinant **tissue factor** and synthetic phospholipids)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:529275 HCAPLUS
DN 121:129275
ED Entered STN: 17 Sep 1994
TI Properties of a new prothrombin time reagent based on recombinant **tissue factor** and synthetic phospholipids
AU Kolde, Hans Juergen; Hawkins, P.; **Tejidor, L.**; Denzler, B.; Ramirez, I.
CS Baxter Diagn., Unterschleissheim, D-85716, Germany
SO Klinisches Labor (1993), 39(7/8), 511-21
CODEN: KLLAEA; ISSN: 0941-2131
DT Journal
LA German
CC 9-15 (Biochemical Methods)
AB The use of recombinant human **tissue factor** permits the standardized production of **thromboplastin** reagents (Innovin, (I), Baxter Diagnostics). I, which is produced from synthetic phospholipids and recombinant **tissue factor**, has several advantages in comparison to conventional **thromboplastins**. Its turbidity is at least 10 fold less, and it does not tend to sediment. A better precision can therefore be achieved. In comparison to various other reagents, which were studied in parallel, it is less sensitive to heparin. Due to the excellent factor sensitivity of I, a better correlation between extrinsic factor concentration and prothrombin time is achieved in comparison to other sensitive **thromboplastins**. The results of I and British comparative **thromboplastin** (BCT) are very similar and very close to the mean values of **factors II**, VII and X in patients with stable oral anticoagulation.
ST prothrombin time reagent recombinant **tissue factor**; phospholipid prothrombin time reagent; **thromboplastin** reagent recombinant **tissue factor**
IT **Blood coagulation**
(determination of, prothrombin time reagent for, recombinant **tissue factor** and synthetic phospholipids in)
IT Phospholipids, uses
RL: USES (Uses)
(in prothrombin time reagent)
IT **9035-58-9, Tissue factor**
RL: ANST (Analytical study)
(human recombinant, in prothrombin time reagent)
IT **9035-58-9, Tissue factor**
RL: ANST (Analytical study)
(human recombinant, in prothrombin time reagent)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN.
AN 1993:423678 HCAPLUS
DN 119:23678
ED Entered STN: 24 Jul 1993
TI Preparation of prothrombin time reagents from recombinant human **tissue factor** and purified natural and synthetic phospholipids
IN Hawkins, Pamela L.; **Tejidor, Liliana**; Maynard, James; Johnson,

Kevin B.
PA Baxter Diagnostics Inc., USA
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-86
ICA A61K009-127
CC 7-1 (Enzymes)
Section cross-reference(s): 9
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9307492	A1	19930415	WO 1992-US8281	19920925
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
	CA 2097199	AA	19930405	CA 1992-2097199	19920925
	CA 2097199	C	20010508		
	AU 9227692	A1	19930503	AU 1992-27692	19920925
	AU 663343	B2	19951005		
	EP 565665	A1	19931020	EP 1992-921544	19920925
	EP 565665	B1	19980304		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
	JP 06505562	T2	19940623	JP 1993-507008	19920925
	JP 3416778	B2	20030616		
	AT 163768	E	19980315	AT 1992-921544	19920925
	ES 2115679	T3	19980701	ES 1992-921544	19920925
	US 5625036	A	19970429	US 1995-371052	19950110
PRAI	US 1991-771294	A	19911004		
	WO 1992-US8281	A	19920925		
	US 1993-32562	B1	19930317		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9307492	ICM	G01N033-86
	ICA	A61K009-127
US 5625036	NCL	530/381.000; 435/013.000; 530/350.000
	ECLA	C07K014/745; G01N033/86

AB A prothrombin time reagent is disclosed for use in a prothrombin time test. The reagent uses recombinant human **tissue factor**, natural or synthetic phospholipids, Ca+2, and a buffer. Stabilizers and salts may also be included. A method for making lipid micelles containing **tissue factor** is also disclosed. By controlling the **tissue factor** source and purity and using highly purified lipids in conjunction with well-defined specific buffers and stabilizers, control of the performance of **tissue factor** in a prothrombin time reagent is improved. The effects on the assay of, e.g., varying recombinant human **tissue factor** concentration, varying recombinant human **tissue factor**:phospholipid ratio, and varying phospholipid fatty acid side chains are presented.

ST prothrombin time reagent **tissue factor** phospholipid; human **tissue factor** recombinant prothrombin time

IT Egg
(phosphatidylcholine from, mixts. with bovine phosphatidylserine, in prothrombin time determination with recombinant human **tissue factor**)

IT Cattle
(phosphatidylserine from, mixts. with egg phosphatidylcholine, in prothrombin time determination with recombinant human **tissue factor**)

IT Buffer substances and systems
(recombinant human **tissue factor** and phospholipids and calcium and, in prothrombin time reagent)

IT Phospholipids, biological studies
RL: BIOL (Biological study)
(recombinant human **tissue factor** and, in

prothrombin time reagent)
IT Micelles
(tissue factor-containing, preparation of, prothrombin time reagent in relation to)
IT 148152-30-1 148154-41-0 148154-42-1 148154-43-2 148154-45-4
148179-31-1 148179-32-2 148179-33-3 148200-14-0 148200-15-1
148260-47-3 148261-07-8 148261-08-9 148346-16-1 148414-90-8
RL: ANST (Analytical study)
(in prothrombin time determination with recombinant human tissue factor)
IT 9035-58-9, Blood-coagulation factor III
RL: ANST (Analytical study)
(phospholipids and recombinant human, in prothrombin time reagent)
IT 81-81-2, Warfarin
RL: ANST (Analytical study)
(prothrombin time determination in patient receiving, reagent for, recombinant human tissue factor and phospholipids in)
IT 10043-52-4, Calcium chloride, uses
RL: USES (Uses)
(prothrombin time reagent with recombinant human tissue factor and phospholipid mixture and)
IT 7365-45-9, HEPES 28728-55-4, Polybrene 68399-81-5, TAPSO 56-40-6, Glycine, uses 7647-14-5, Sodium chloride, uses
RL: ANST (Analytical study)
(prothrombin time reagent with recombinant human tissue factor and phospholipid mixture and, tissue factor performance in relation to)
IT 7440-70-2, Calcium, uses
RL: USES (Uses)
(recombinant human tissue factor and phospholipids and, in prothrombin time reagent)
IT 9001-26-7, Prothrombin
RL: ANST (Analytical study)
(time, reagent for, recombinant human tissue factor and phospholipids in)
IT 9035-58-9, Blood-coagulation factor III
RL: ANST (Analytical study)
(phospholipids and recombinant human, in prothrombin time reagent)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:531408 HCAPLUS
DN 115:131408
ED Entered STN: 05 Oct 1991
TI Method of monitoring reagent delivery in a scanning spectrophotometer
IN Driscoll, Richard Cornelius; Fischer, Timothy J.
PA AKZO N. V., Neth.
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N021-00
ICS C08L089-00
CC 9-5 (Biochemical Methods)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9108461	A1	19910613	WO 1990-US7068	19901203
W: AU, CA, FI, GR, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5068181	A	19911126	US 1989-443953	19891201

	AU 9169512	A1	19910626	AU 1991-69512	19901203
	AU 655577	B2	19950105		
	EP 502983	A1	19920916	EP 1991-901116	19901203
	EP 502983	B1	19960828		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	AT 142018	E	19960915	AT 1991-901116	19901203
	ES 2095310	T3	19970216	ES 1991-901116	19901203
	CA 2069887	C	20040210	CA 1990-2069887	19901203
	JP 05502723	T2	19930513	JP 1991-501583	19911218
	JP 2902108	B2	19990607		
	FI 9202478	A	19920529	FI 1992-2478	19920529
	FI 101575	B1	19980715		
PRAI	US 1989-443953	A	19891201		
	WO 1990-US7068	A	19901203		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9108461	ICM	G01N021-00
	ICS	C08L089-00
US 5068181	NCL	435/013.000; 356/039.000; 436/056.000; 436/069.000; 436/164.000; 436/166.000; 436/172.000; 436/800.000

AB A method for measuring the concentration of a reagent in a reaction mixture comprises: adding dye to a reagent until the dye is at a given concentration in the reagent; mixing the reagent with a specimen to form a reaction mixture, wherein the specimen comprises a component which reacts with the reagent to form a reaction product; measuring the formation of reaction product at a first spectral region; measuring the concentration of dye in the reaction mixture at a second spectral region in which the dye has an optical characteristic, such as absorption or fluorescence, the second spectral region being different from the first spectral region; and determining the concentration of the reagent in the reaction mixture based on the concentration of dye measure. In a further aspect of the invention there is provided a reagent containing a dye useful in the above method. Patent Blue VF was added to **thromboplastin** at 1.15 mg/L for a final concentration at 0.75 mg/L. A 1-2% increase in prothrombin clotting occurred when the dye was added. No difference in the shape of the waveform at 565 nm was detected when dye was present, nor did the dye affect clot formation determination

ST reagent monitoring dye spectrophotometer; blood clotting assay reagent monitoring

IT Blood analysis
(reagent monitoring in spectrophotometric, dyes for)

IT **Blood coagulation**
(reagents for, monitoring of, in spectrophotometer, dyes for)

IT Chemicals
(reagents, monitoring, in spectrophotometer, dyes for)

IT Spectrometers
(scanning, reagent monitoring in, dyes for)

IT 81-88-9, Rhodamine B
RL: ANST (Analytical study)
(for calcium chloride monitoring in blood spectrophotometry)

IT 129-17-9, Patent Blue VF
RL: ANST (Analytical study)
(for reagent monitoring in spectrophotometer)

IT **9002-04-4, Thrombin** **9002-05-5, Thromboplastin**
10043-52-4, Calcium chloride, biological studies
RL: ANST (Analytical study)
(monitoring, in spectrophotometer, dyes for)

IT **9002-04-4, Thrombin**
RL: ANST (Analytical study)
(monitoring, in spectrophotometer, dyes for)

RN 9002-04-4 HCAPLUS

CN Thrombin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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L55 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:379625 HCAPLUS
DN 139:385964
ED Entered STN: 19 May 2003
TI Changes in functional activities of plasma fibrinogen after treatment with methylene blue and red light
AU Suontaka, Anna-Maija; Blomback, Margareta; Chapman, John
CS Department of Surgical Sciences/Blood Coagulation Research, Karolinska Institute, Stockholm, Swed.
SO Transfusion (Malden, MA, United States) (2003), 43(5), 568-575
CODEN: TRANAT; ISSN: 0041-1132
PB Blackwell Publishing, Inc.
DT Journal
LA English
CC 63-3 (Pharmaceuticals)
AB Methylene blue (MB) plus light treatment used for virus inactivation of human plasma units may lead to changes in the functional activities of fibrinogen. Single-donor units of fresh plasma were treated with 1.0 μM MB and a red light dose of 48 μper cm2. The effects of MB plus red light treatment on fibrinogen clottability, **fibrin polymerization** and gelation, clot stabilization, and fibrinolysis were studied. The concentration of clottable fibrinogen was unchanged during MB plus red light treatment, but a light-dose-dependent decrease of the concentration of functional fibrinogen was found. The initial release rate of fibrinopeptide A was slightly increased after MB plus red light treatment. Turbidity measurements of **fibrin** gel showed prolonged clotting time, lower **fibrin** fiber mass-to-length ratio, and slightly smaller fiber diameter At a given clotting time, a gel with lower **fibrin** fiber mass-to-length ratio was produced. Clot stability and fibrinolysis remained normal. L-Histidine added to plasma before MB plus red light treatment normalized the thrombin-induced coagulation time in a dose-dependent way. MB plus red light treatment affected the **polymerization** and gelation phase of **fibrin**. A tighter **fibrin** gel structure was formed. No effect on stabilization of **fibrin** clot or fibrinolysis was found.
ST blood plasma methylene blue red light antiviral fibrinogen coagulation
IT Antiviral agents
Blood products
Fibrinolysis
Human
Turbidity
(changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT Fibrinogens
Fibrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT Fibrinogen degradation products
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(fibrinopeptide A; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT Blood plasma
(platelet-poor; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT Light
(red; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT **Thrombus**
(stability; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT **Blood coagulation**
(time; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)

IT 9013-56-3, Blood-coagulation factor XIII 9035-58-9, **Blood-coagulation factor III**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT 71-00-1, L-Histidine, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
IT 61-73-4, Methylene blue
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
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IT 9035-58-9, **Blood-coagulation factor III**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L55 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:434060 HCAPLUS
DN 133:261152
ED Entered STN: 29 Jun 2000

TI Hemostatic abnormalities associated with acute promyelocytic leukemia and corrective effects of all-trans-retinoic acid or arsenic trioxide treatment

AU Zhao, Weili; Wang, Xuefeng; Guo, Weimin; Qu, Bin; Wang, Hongli; Shen, Zhixiang; Chen, Zhu; Wang, Zhenyi
CS Ruijin Hospital, Shanghai Second Medical University, Shanghai, 200025, Peop. Rep. China

SO Chinese Medical Journal (Beijing, English Edition) (2000), 113(3), 236-240
CODEN: CMJODS; ISSN: 0366-6999
PB Chinese Medical Association
DT Journal
LA English
CC 1-6 (Pharmacology)
Section cross-reference(s): 14

AB The objective was to study in vivo effect of all-trans-retinoic acid (ATRA) or arsenic trioxide (As2O3) on the expression of **tissue factor** (TF) and the hemostatic disorders, a series of parameters were measured in bone marrow blasts and plasma from acute promyelocytic leukemia (APL) patients. The plasma variables were measured by ELISA or chromogenic study. The TF transcription was assessed using reverse transcription-**polymerase** chain reaction technique (RT-PCR). The blast cell procoagulant activity (PCA), TF antigen of APL cell lysates, as well as the transcription of APL TF mRNA elevated at diagnosis, were reduced after ATRA or As2O3 therapy. The plasma level of platelet α-granular membrane protein-140, soluble **fibrin** monomer complex, thrombomodulin, tissue plasminogen activator and D-dimer significantly increased, fibrinogen, antigen level of protein C, plasminogen, α2-plasminogen inhibitor and plasminogen activator inhibitor decreased at diagnosis, were restored to normal after complete remission but protein C activity and protein S remained elevated in ATRA group. Conclusions; There existed activation of platelets and consumption of anticoagulants as well as activation of coagulation and fibrinolytic system before treatment. Both ATRA and As2O3 therapy down-regulated the expression of TF mRNA, decreased the PCA and TF level in APL cells, inhibited coagulation activation, secondary hyperfibrinolysis and recorrected other hemostatic abnormalities, thus greatly improved the bleeding symptom in early stage of the treatment.

ST retinoate arsenic trioxide leukemia blood coagulation

IT Selectins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(P-; effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)

IT **Blood-coagulation factors**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PCA (**procoagulant** activity); effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)

IT Platelet (blood)
(activation; effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)

IT Antitumor agents
(acute promyelocytic leukemia; effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)

IT **Blood coagulation**
Fibrinolysis
Hemorrhage
(effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)

IT Fibrins
mRNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)
IT 302-79-4, all-trans-Retinoic acid 1327-53-3, Arsenic trioxide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)
IT 9001-91-6, Plasminogen 9035-58-9, Blood-coagulation factor III 105844-41-5, Plasminogen activator inhibitor 138757-15-0 139639-23-9, Tissue plasminogen activator
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
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IT 9035-58-9, Blood-coagulation factor III
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effects of retinoic acid and arsenic trioxide on hemostatic abnormalities associated with acute promyelocytic leukemia)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L55 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:414580 HCAPLUS
DN 133:26632
ED Entered STN: 22 Jun 2000
TI Simvastatin attenuates vascular hypercoagulability in cardiac transplant recipients
AU Holschermann, Hans; Hilgendorff, Anne; Kemkes-Matthes, Bettina; Schonburg, Markus; Bauer, Erwin P.; Tillmanns, Harald; Haberbosch, Werner
CS Department of Internal Medicine, Division of Cardiology, Justus-Liebig-University Giessen, Giessen, D-35392, Germany
SO Transplantation (2000), 69(9), 1830-1836
CODEN: TRPLAU; ISSN: 0041-1337
PB Lippincott Williams & Wilkins
DT Journal
LA English
CC 1-8 (Pharmacology)
AB Background. 3-Hydroxy-3-methylglutaryl CoA (HMG-CoA) reductase inhibitors have been shown to reduce cardiac allograft failure and to lower the incidence of transplant coronary artery disease. These effects result from as yet unknown mechanisms not clearly attributable to lipid lowering. We here report that low-dose simvastatin treatment inhibits excessive expression of monocyte tissue factor (TF) and reduces the persistent hypercoagulability state seen in cardiac transplant recipients. Methods. Fifteen consecutive heart transplant recipients

receiving standard oral immunosuppression were newly assigned to a 10 mg daily simvastatin therapy. Levels of TF activity in both unstimulated and lipopolysaccharide-stimulated peripheral blood mononuclear cells drawn from transplant recipients before and under simvastatin therapy were evaluated by one-stage clotting assay. Results. Monocyte TF activity was found to be significantly increased in cardiac transplant recipients when compared with healthy controls. Excessive monocyte procoagulant activity was reduced in cardiac transplant recipients during simvastatin treatment. This effect occurred independently of the reduction of serum low-d. lipoprotein cholesterol. As demonstrated by reverse transcriptase-**polymerase** chain reaction, monocyte TF reduction by simvastatin, observed in 13 of the 15 transplant recipients investigated, could be ascribed to an inhibition of monocyte TF gene transcription. The reduction of monocyte TF activity during treatment with simvastatin paralleled with the normalization of elevated levels of **thrombin**-antithrombin complex, prothrombin fragment F1+2, and D-dimer, which are markers of **thrombin** and **fibrin** formation indicating coagulation activation after cardiac transplantation. Conclusion. Inhibition of monocyte TF expression and attenuation of the persistent hypercoagulable state observed in cardiac transplant recipients during treatment with simvastatin may represent an important mechanism by which HMG-CoA reductase inhibitors protect against the development of transplant coronary artery disease.

ST simvastatin hypercoagulability heart transplant cardioprotectant

IT **Blood-coagulation factors**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PCA (**procoagulant** activity); simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT Cytoprotective agents
(cardioprotective; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT Transplant and Transplantation
Transplant and Transplantation
(heart; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT **Blood coagulation**
(hypercoagulability; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT Heart
Heart
(transplant; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT 79902-63-9, Simvastatin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD

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L55 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:391625 HCAPLUS
DN 129:132855
ED Entered STN: 26 Jun 1998
TI Prevention of the influence of fibrin and α2-macroglobulin in the continuous measurement of the thrombin potential: implications for an endpoint determination of the optical density
AU Rijkers, Dirk T. S.; Wielders, Simone J. H.; Beguin, Suzette; Hemker, H. Coenraad
CS Faculty of Medicine, Department of Biochemistry and Cardiovascular Research Institute, Maastricht University, Maastricht, 6200 MD, Neth.
SO Thrombosis Research (1998), 89(4), 161-169
CODEN: THBRAA; ISSN: 0049-3848
PB Elsevier Science Inc.
DT Journal
LA English
CC 7-1 (Enzymes)
Section cross-reference(s): 14
AB We proposed the endogenous thrombin potential (ETP) as an overall function test of the coagulation system. We recently introduced a routine test which requires defibrinated plasma. In order to develop an assay in which the ETP-value can be directly obtained by measuring the optical d., we investigated two methods to inhibit fibrinogen clottability and to inactivate α2-macroglobulin. The first method makes use of hydroxylamine to inactivate α2-macroglobulin and H-Gly-Pro-Arg-Pro-OH to inhibit **fibrin polymerization** At pH 7.35, plasma incubated with 25 mM hydroxylamine and 1.5 mg/mL H-Gly-Pro-Arg-Pro-OH for 5 min at 37° resulted in a reduced end level of the amidolytic activity on small chromogenic substrates. The second method uses a metalloprotease purified from Crotalus basiliscus to remove α2-macroglobulin from plasma in combination with H-Gly-Pro-Arg-Pro-OH. Herein plasma is incubated with 3.5 μM protease during 15 min at 37° in the presence of 1 mg/mL **polymerization** inhibitor. The enzymic method results in a zero end level of the amidolytic activity and this would imply that measurement of the ETP is reduced to an endpoint determination of the optical d. We show that the endpoint

determination of the optical d. correlates well with the calculated ETP in plasmas with different degrees of anticoagulation.

ST thrombin endpoint detn fibrin alpha2 macroglobulin

IT Blood analysis
Blood coagulation
Densitometry (optical)
Polymerization inhibitors
(prevention of influence of **fibrin** and α2-macroglobulin in continuous measurement of thrombin potential for optical d. endpoint **determination**)

IT Fibrins
RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(prevention of influence of fibrin and α2-macroglobulin in continuous measurement of thrombin potential for optical d. endpoint determination)

IT Macroglobulins
RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(α2-; prevention of influence of fibrin and α2-macroglobulin in continuous measurement of thrombin potential for optical d. endpoint determination)

IT 9002-04-4, Thrombin
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(prevention of influence of fibrin and α2-macroglobulin in continuous measurement of thrombin potential for optical d. endpoint determination)

IT 181017-16-3
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(prevention of influence of fibrin and α2-macroglobulin in continuous measurement of thrombin potential for optical d. endpoint determination)

IT 7803-49-8, Hydroxylamine, biological studies 9001-92-7D, Protease, complexes with myoglobin **9035-58-9, Blood-coagulation factor III** 67869-62-9
81669-70-7, Metalloprotease
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(prevention of influence of fibrin and α2-macroglobulin in continuous measurement of thrombin potential for optical d. endpoint determination)

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD

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IT 9035-58-9, **Blood-coagulation factor III**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(prevention of influence of fibrin and α2-macroglobulin in continuous measurement of thrombin potential for optical d. endpoint determination)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L55 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:675288 HCAPLUS
DN 127:344499
ED Entered STN: 24 Oct 1997
TI Thrombosis and atherosclerosis
AU Holvoet, Paul; Collen, Desire
CS Center for Molecular and Vascular Biology, University of Leuven, Louvain, B-3000, Belg.
SO Current Opinion in Lipidology (1997), 8(5), 320-328
CODEN: COPLEU; ISSN: 0957-9672
PB Rapid Science Publishers
DT Journal; General Review
LA English
CC 14-0 (Mammalian Pathological Biochemistry)
AB A review with 89 refs. The initial step in atherosclerosis is the rapid targeting of monocytes to the sites of inflammation and endothelial injury. Serum levels of intercellular adhesion mol.-1 were increased in ischemic heart disease patients and polymorphisms in the E-selectin gene were associated with accelerated atherosclerosis in young (age < 40 yr) patients, further suggesting a role of inflammation in atherosclerosis. Cholesterol loading in macrophages was found to induce interleukin-8 expression, suggesting an association between foam cell formation and β2-integrin-dependent adhesion of leukocytes. Enhanced endothelium-platelet interaction induced by hypercholesterolemia is mediated by von Willebrand factor, whereas platelet adhesion to subendothelial matrix is mediated by fibulin-fibrinogen complexes. Activated platelets mediate the homing of leukocytes by interaction with the subendothelial matrix under shear stresses that do not allow neutrophil adhesion. They may also contribute to the oxidative modification of LDL, provide a source of lipids for foam cell generation and contribute to smooth muscle cell proliferation. Oxidized LDL induces **tissue factor** in macrophages that also provide sites for **fibrin polymerization** and decreases the anticoagulant activity of endothelium by interfering with thrombomodulin expression and inactivating **tissue factor** pathway inhibitor. Intravascular fibrinolysis induced by tissue-type plasminogen activator or urokinase may contribute to the initiation of atherosclerosis by inducing P-selectin and platelet activating factor as well as to plaque rupture, either directly or indirectly, by activating metalloproteinases. Plasminogen activator inhibitor-1 inhibits smooth muscle cell migration and, in the presence of vitronectin, promotes the clearance of **thrombin** by LDL receptor-related protein at sites of endothelial injury.
ST review thrombosis atherosclerosis protein

IT Atherosclerosis
Thrombosis
(thrombosis and atherosclerosis in humans in relation to involved proteins)
IT Proteins, general, biological studies
RL: ADV (Adverse effect, including toxicity); BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(thrombosis and atherosclerosis in humans in relation to involved proteins)
RE.CNT 89 THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD
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(87) Yamagishi, S; FEBS Lett 1996, V384, P103 HCAPLUS
(88) Zimmerman, G; J Clin Invest 1996, V98, P1699 HCAPLUS
(89) Zitoun, D; Arterioscler Thromb Vasc Biol 1996, V16, P77 MEDLINE

L55 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:971371 HCAPLUS
DN 124:83649
ED Entered STN: 08 Dec 1995
TI Procoagulant activity after exposure of monocyte-derived macrophages to minimally oxidized low density lipoprotein. Co-localization of **tissue factor** antigen and nascent fibrin fibers at the cell surface
AU Lewis, Jon C.; Bennett-Cain, Andrea L.; DeMars, Carl S.; Doellgast, George J.; Grant, Kenneth W.; Jones, Nancy L.; Gupta, Madhu
CS Bowman Gray School Medicine, Wake Forest University, Winston-Salem, NC, 27157-1092, USA
SO American Journal of Pathology (1995), 147(4), 1029-40
CODEN: AJPAA4; ISSN: 0002-9440
PB American Society for Investigative Pathology
DT Journal
LA English
CC 14-5 (Mammalian Pathological Biochemistry)
AB The role of **tissue factor** (TF) as an initiator of the thrombotic complications secondary to atherosclerosis has been acknowledged, and in situ expression of TF activity by monocyte-derived macrophages and lesion-associated macrophage foam cells has been documented. Macrophages express TF activity upon exposure in vitro to either oxidized low d. lipoprotein LDL (Ox-LDL) or endotoxin (lipopolysaccharide). This activity has been associated with membrane vesicles that apparently are shed after procoagulant expression. The present study, based upon the correlative use of an enzyme-linked coagulant assay and 3-dimensional multi-antigen, immunogold electron microscopy, reports the ultrastructural localization of TF antigen and spatially correlates TF with Ox-LDL binding and the presence of nascent **fibrin polymers** on the

plasma membrane of cultured macrophages. Pigeon monocyte/macrophages, after a 4-h induction with lipopolysaccharide (2 μg/mL) or minimally oxidized LDL (50 μg/mL; thiobarbituric acid reducing substance, 5-8 nmol/mg protein) were incubated for 40 min in a Tris-buffered medium containing factors VII, V, X, II, and I before either assaying for coagulant activity or processing for gold-colloid cytochem. TF activity, as measured by enzyme-linked coagulant assay peaked 6 h after agonist exposure with lipopolysaccharide and Ox-LDL giving, resp., 115- and 60-fold stimulation as compared with control. This activity corresponded to the elaboration of membrane ruffles and microvilli on the cell surfaces. Through correlative immunogold cytochem. (15-nm-diameter colloid) and gold-ligand cytochem. (30-nm-diameter colloid), TF antigen (83%) and Ox-LDL (78%) were primarily associated with the membrane ruffles and microvilli. Multi-antigen immunogold cytochem. when used in conjunction with ligand-gold cytochem. documented co-localization of Ox-LDL (22-nm gold), TF antigen (15-nm gold), and a delicate 3-dimensional network of short **fibrin** fibers that were decorated in a linear fashion with the immunogold probes (30-nm gold). Thus, TF antigen is located at selected regions on the cell surfaces. Furthermore, these same regions provide binding sites for agonist uptake and organization sites for **fibrin polymerization** Hypothetically, the localized membrane regions could be shed from the cell surface as a means for regulating coagulation potential.

ST **tissue factor** fibrin macrophage atherosclerosis thrombosis

IT Cell membrane
Macrophage
Thrombosis
(co-localization of **tissue factor** antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis)

IT Fibrins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(co-localization of **tissue factor** antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis)

IT Arteriosclerosis
(atherosclerosis, co-localization of **tissue factor** antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis)

IT Lipoproteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(low-d., oxidized, co-localization of **tissue factor** antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis)

IT **9035-58-9, Blood-coagulation factor III**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(co-localization of **tissue factor** antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis)

IT **9035-58-9, Blood-coagulation factor III**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(co-localization of **tissue factor** antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to

monocyte/macrophage role in atherosclerosis-related thrombosis)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L55 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:572694 HCAPLUS
DN 123:6401
ED Entered STN: 25 May 1995
TI The thrombin activation pathway modulates the assembly, structure and lysis of human plasma clots in vitro
AU Torbet, Jim
CS Lab. Elaboration Proc. Magnet., CNRS, Grenoble, Fr.
SO Thrombosis and Haemostasis (1995), 73(5), 785-92
CODEN: THHADQ; ISSN: 0340-6245
PB Schattauer
DT Journal
LA English
CC 13-5 (Mammalian Biochemistry)
AB Thrombin activation of the soluble plasma protein fibrinogen is vital for successful hemostasis. Thrombin is generated from prothrombin by the prothrombinase complex which also includes factor Xa, factor Va, Ca2+ and a procoagulant membrane surface. Factor X activation is catalyzed in a complex including either factor VIIa and **tissue factor**, or factor IXa and factor VIIIa. Factor IXa can be generated either by the **factor** VIIa/**tissue factor** complex or by factor XIa which is in turn produced by the contact phase reactions in vitro. Once activated, fibrinogen develops into the **fibrin polymeric** matrix at the site of injury. It is not known to what extent the properties of this hemostatic plug are sensitive to the pathway leading up to thrombin generation. Here static human plasma is studied in vitro using magnetically induced birefringence. It is shown that the contact phase/factor XIa pathway gives rise to linear **fibrin** assembly progress curves whereas the **factor** VIIa/**tissue factor** activation of factor X provokes largely sigmoid assembly. The latter pathway also causes the formation of significantly thicker fibers even although assembly is more rapid. This result is the inverse of that anticipated from the study of simple model systems. While the streptokinase activated lysis of both types of clot exhibits similar biphasic kinetics, an exponential main phase followed by a sigmoidal tailing off, the data suggest that clots produced by the contact phase/factor XIa pathway are more recalcitrant to lysis. These results demonstrate that the **profile** of thrombin generation not only dets. the kinetics of assembly but also influences the rate of lysis and structure of the haemostatic plug.
ST thrombin activation blood clot assembly structure
IT Fibrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(the contact phase/factor XIa pathway gives rise to linear fibrin assembly progress curves)
IT **Blood coagulation**
Fibrinolysis
Thrombus and Blood clot
(the thrombin activation pathway modulates the assembly, structure and lysis of human plasma clots in vitro)
IT 37203-61-5, Blood-coagulation factor XIa
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(contact phase-factor XIa pathway cause linear fibrin assembly in humans)
IT 9001-29-0, Blood-coagulation factor X 9035-58-9, **Blood-coagulation factor III** 65312-43-8, Blood-coagulation factor VIIa
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(factor VIIa-tissue factor activation of factor X provokes largely sigmoid fibrin assembly in humans)
IT 9002-01-1, Streptokinase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(fibrinolysis kinetics of blood clot types in human)
IT 9002-04-4, Thrombin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(the thrombin activation pathway modulates the assembly, structure and lysis of human plasma clots in vitro)
IT 9035-58-9, Blood-coagulation factor III
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(factor VIIa-tissue factor activation of factor X provokes largely sigmoid fibrin assembly in humans)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L55 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:260779 HCAPLUS
DN 118:260779
ED Entered STN: 26 Jun 1993
TI Human coagulation factor IX: assessment of thrombogenicity in animal models and viral safety
AU Herring, Steven W.; Abildgaard, C.; Shitanishi, K. T.; Harrison, J.; Gendler, S.; Heldebrant, C. M.
CS Alpha Therapeutic Corp., Los Angeles, CA, 90032, USA
SO Journal of Laboratory and Clinical Medicine (1993), 121(3), 394-405
CODEN: JLCMAK; ISSN: 0022-2143
DT Journal
LA English
CC 63-3 (Pharmaceuticals)
Section cross-reference(s): 1
AB Thromboembolic complications associated with prothrombin complex concentrate treatment may be related to the high levels of factors II and X in these products. We report here results from preclin. safety studies with a human coagulation factor IX product (AlphaNine) that contains no detectable factor II or VII and less than 10 units of factor X/100 units of factor IX. This product was manufactured from virally inactivated factor IX complex with a barium citrate adsorption step followed by affinity chromatog. yielding factor IX concentrate with a specific activity of about 86 factor IX units/mg protein. Electrophoresis and immunoblot anal. indicated that the factor IX represents about 65% of the protein in this product. The virus inactivation step incorporated into the manufacturing process (incubation with n-heptane at 60° for 20 h) was shown to inactivate at least 8.6 logs of type 1 human immunodeficiency virus. The barium citrate adsorption and affinity chromatog. steps were found to remove 2.0 logs of the marker virus, vaccinia, and the DEAE ion-exchange chromatog. used to produce factor IX complex was found to remove 1.4 logs of the marker virus, Sindbis. Anal. of 3 sep. manufacturing lots with the polymerase chain reaction revealed no evidence of hepatitis C virus. The purified factor IX was nonthrombogenic when tested at doses of 450 units/kg in a rabbit stasis (Wessler) model, whereas the prothrombin complex concs. were found to be thrombogenic at doses of less than 50 units/kg. There was no evidence of DIC in a porcine model after infusion of 200 units/kg of coagulation factor IX, as manifested by neg. fibrin monomer tests, the absence of fibrin in blood vessels at autopsy, little or no change in prothrombin times and partial thromboplastin times, and only moderate decreases in platelet levels after infusion.

ST blood coagulation factor IX thrombogenicity safety
IT **Thrombosis**
(from human blood coagulation factor IX concs., lack of, in evaluation study)
IT Virus, animal
(human blood coagulation factor IX concs. safety in relation to)
IT 9001-28-9, Blood coagulation factor IX
RL: BIOL (Biological study)
(concs., thrombogenicity and viral safety of human)

L55 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:243874 HCAPLUS
DN 114:243874
ED Entered STN: 28 Jun 1991
TI Dry reagent technology for rapid, convenient measurements of blood coagulation and fibrinolysis
AU Oberhardt, Bruce J.; Dermott, Sharon C.; Taylor, Murdock; Alkadi, Zaid Y.; Abruzzini, Anthony F.; Gresalfi, Nancy J.
CS Cardiovasc. Diagn., Inc., Research Triangle Park, NC, 27709, USA
SO Clinical Chemistry (Washington, DC, United States) (1991), 37(4), 520-6
CODEN: CLCHAU; ISSN: 0009-9147
DT Journal
LA English
CC 9-15 (Biochemical Methods)
AB Rapid coagulation and fibrinolysis assays suitable for use with an imprecisely measured sample volume (either whole blood or plasma) have been developed, utilizing a technol. based on paramagnetic iron oxide particles (PIOP) that move in response to an oscillating magnetic field. PIOP are combined with appropriate test reagents for clotting and thrombolysis assays and formulated as dry reagents within a capillary test chamber. The min. and maximum of the PIOP oscillations define a 2-sided waveform that provides kinetic information on **fibrin polymerization** and lysis. Subject to the chemical of the dry reagent formulation, the resulting waveform can be used to define clotting time, lysis onset time, or fibrinogen variables. Applications to 1-stage prothrombin time and 1-stage activated partial **thromboplastin** time tests have yielded assays with consistently good correlations with other test methods. Applications to fibrinolysis studies have yielded global assays of thrombolytic activity, in that the assay results reflect the interactions of multiple factors associated with the effectiveness of thrombolytic therapy. Depending on the components utilized in a particular reagent formulation, one can derive information about the activity of such factors as fibrinogen, plasminogen, and related inhibitors, as well as the lytic agent being administered. Use of these assays in a clin. setting should provide a rapid, convenient alternative to conventional testing of coagulation variables and a reliable method for monitoring thrombolytic therapy.
ST dry reagent blood coagulation fibrinolysis detn
IT **Blood coagulation**
Fibrinolysis
(**determination** of, dry reagent technol. for)
IT 1332-37-2, Iron oxide, analysis
RL: ANST (Analytical study)
(paramagnetic, particles, dry reagent formulations containing, for blood coagulation and fibrinolysis determination)

L55 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:136754 HCAPLUS
DN 112:136754
ED Entered STN: 13 Apr 1990
TI Activation of endothelial cells induces platelet thrombus formation on their matrix. Studies of new in vitro thrombosis model with low molecular weight heparin as anticoagulant
AU Zwaginga, Jaap J.; Sixma, Jan J.; De Groot, Philip G.
CS Dep. Hematol., Univ. Hosp. Utrecht, Utrecht, 3508GA, Neth.

SO Arteriosclerosis (Dallas) (1990), 10(1), 49-61
CODEN: ARTRDW; ISSN: 0276-5047
DT Journal
LA English
CC 14-5 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 9

AB The authors studied the effect of endothelial cell activation and subsequent **tissue factor** synthesis on thrombus formation on the extracellular matrix in flowing blood. Endothelial cells were stimulated with tumor necrosis factor, endotoxin, or phorbol ester. Coverslips with activated cells or their extracellular matrix were introduced into a perfusion system and exposed to blood anticoagulated with 20 U/mL low mol. weight heparin. This concentration allowed manipulation of blood without activation of the coagulation cascade. Platelet deposition and **fibrin** formation were evaluated by morphometry, and fibrinopeptide A formation was assayed as a measure of **thrombin** generation. Activation of endothelial cells caused fibrinopeptide A generation in the perfusate and some deposition of **fibrin** on endothelial cells; however, platelets were not deposited. The matrix of the stimulated endothelium also caused enhanced fibrinopeptide A generation, and platelet aggregates and **fibrin** were deposited on the matrix. Maximal effects were observed with stimulation periods between 4 and 10 h and were still clearly present after 18 h. Increase in shear rate, perfusion time, and platelet number resulted in an increase in platelet adhesion, but platelet aggregate formation as a percentage of adhesion remained constant Platelet aggregate formation and fibrinopeptide A generation were inhibited with antibodies against **tissue factor** or factor VIIa. Platelet aggregate formation alone was inhibited by antibodies against glycoprotein IIb/IIIa. **Polymerization** of **fibrin** on the matrix was best supported in perfusions at a low shear rate. The new in vitro thrombosis model presented here provides a powerful tool for study of the regulation of thrombogenesis by the vessel wall in response to various stimuli.

ST thrombosis model endothelium activation heparin

IT **Blood coagulation**
(cascade, platelet and subendothelial interactions with, in vitro model for study of)

IT Fibrins
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(deposition of, in in vitro thrombosis model)

IT Blood platelet
(deposition of, in in vitro thrombosis model, **tissue factor** in relation to)

IT Lipopolysaccharides
RL: BIOL (Biological study)
(endothelial cell activation from, **tissue factor** and **thrombin** formation after, in in vitro thrombosis model)

IT **Thrombosis**
(model for, in vitro, **tissue factor** and **thrombin** formation in, low-mol.-weight heparin in relation to)

IT Glycoproteins, specific or class
RL: BIOL (Biological study)
(IIIa, complexes, with glycoprotein IIb, **thrombin** formation by activated endothelial cells in in vitro thrombosis model in relation to)

IT Glycoproteins, specific or class
RL: BIOL (Biological study)
(IIb, complexes, with glycoprotein IIIa, **thrombin** formation by activated endothelial cells in in vitro thrombosis model in relation to)

IT Lymphokines and Cytokines
RL: BIOL (Biological study)
(tumor necrosis factor, endothelial cell activation from, **tissue factor** and **thrombin** formation after, in in vitro thrombosis model)

IT 9001-29-0, Blood-coagulation factor X

RL: BIOL (Biological study)
(-factor VIIa pathway, **thrombin** formation in in vitro thrombosis model in relation to)
IT 65312-43-8, Blood-coagulation factor VIIa
RL: BIOL (Biological study)
(-factor X pathway, **thrombin** formation in in vitro thrombosis model in relation to)
IT 16561-29-8
RL: BIOL (Biological study)
(endothelial cell activation from, **tissue factor** and **thrombin** formation after, in in vitro thrombosis model)
IT 9001-28-9, Blood-coagulation factor IX
RL: BIOL (Biological study)
(factor VIIa pathway, **thrombin** formation in in vitro thrombosis model in relation to)
IT **9035-58-9, Blood-coagulation factor III**
RL: FORM (Formation, nonpreparative)
(formation of, after endothelial cell activation in in vitro thrombosis model)
IT **9002-04-4, Thrombin**
RL: FORM (Formation, nonpreparative)
(formation of, in in vitro thrombosis model)
IT 9005-49-6, Heparin, biological studies
RL: BIOL (Biological study)
(fragmin, as anticoagulant, in in vitro thrombosis model)
IT **9035-58-9, Blood-coagulation factor III**
RL: FORM (Formation, nonpreparative)
(formation of, after endothelial cell activation in in vitro thrombosis model)
RN 9035-58-9 HCAPLUS
CN Blood-coagulation factor III (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **9002-04-4, Thrombin**
RL: FORM (Formation, nonpreparative)
(formation of, in in vitro thrombosis model)
RN 9002-04-4 HCAPLUS
CN Thrombin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L55 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1988:471385 HCAPLUS
DN 109:71385
ED Entered STN: 02 Sep 1988
TI Fibrinogen New York II, III, and IV: relationship between abnormal **fibrin** monomer **polymerization**, bleeding tendency, and thrombotic tendency
AU Liu, Chung Y.; Karp, George
CS Columbia Univ., New York, NY, USA
SO International Congress Series (1987), 745(Fibrinogen 2), 53-6
CODEN: EXMDA4; ISSN: 0531-5131
DT Journal
LA English
CC 14-6 (Mammalian Pathological Biochemistry)
AB The occurrence of 3 new abnormal human fibrinogen variants, designated New York II, III, and IV, is reported. All 3 patients had prolonged **thrombin** time, reptilase time, partial **thromboplastin** time, and prothrombin time. Blood plasma fibrinogen levels were low-normal or below-normal. There was no indication of an excessive bleeding tendency or thrombotic tendency in the patients, suggesting that abnormal fibrinogen structure is not necessarily correlated with bleeding and/or thrombotic tendency.
ST fibrinogen variant New York hemorrhage thrombosis

IT Hemorrhage
Thrombosis
(fibrinogens New York II and III and IV in relation to, in humans)
IT Fibrinogens
RL: BIOL (Biological study)
(New York II, bleeding and thrombotic tendency association with, in humans)
IT Fibrinogens
RL: BIOL (Biological study)
(New York III, bleeding and thrombotic tendency association with, in humans)
IT Fibrinogens
RL: BIOL (Biological study)
(New York IV, bleeding and thrombotic tendency association with, in humans)

L55 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1980:421947 HCAPLUS
DN 93:21947
ED Entered STN: 12 May 1984
TI Nephelometric measurements for blood coagulation analyses
AU Noren, I.; Blombaeck, M.; Unger, P.; Oehlin, E.
CS Dep. Blood Coagulation Disord., Karolinska Sjukhuset, Stockholm, Swed.
SO Proceedings of the Serono Symposia (1979), Volume Date 1977, 15(Haemostasis Thromb.), 635-40
CODEN: PSSYDG; ISSN: 0308-5503
DT Journal
LA English
CC 9-4 (Biochemical Methods)
Section cross-reference(s): 13
AB An instrument is described for nephelometric measurements of **fibrin polymerization** and coagulation end-point detns. The instrument (Trombometer 761) was used for various routine coagulation tests such as prothrombin time, activated partial **thromboplastin** time (APTT), and fibrinogen detns. with **fibrin polymerization** time. It was also used for measuring thrombin times, and in a 2-stage coagulation assay. In the APTT assay, the instrument registered shorter coagulation times than those obtained by manual testing and visual inspection. The drawback of the instrument is that only plasma, and not whole blood samples, can be measured. Moreover, the plasma must not be too lipemic or turbid.
ST plasma **fibrin polymn** detn; nephelometry **fibrin polymn**; blood coagulation detn nephelometer
IT **Blood coagulation**
(**determination** of, in blood plasma, nephelometer for)
IT Nephelometers
(for blood coagulation tests)
IT **Fibrins**
RL: RCT (Reactant); RACT (Reactant or reagent)
(**polymerization** of, in blood plasma, nephelometer for determination of)

L55 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1978:59853 HCAPLUS
DN 88:59853
ED Entered STN: 12 May 1984
TI Nephelometric measurements for blood coagulation analyses
AU Noren, I.; Blombaeck, M.; Unger, P.; Oehlin, E.
CS Klin.-Kem. Lab., Soedersjukhuset, Stockholm, Swed.
SO Aerztliche Laboratorium (1977), 23(11), 518-24
CODEN: AELAAH; ISSN: 0001-9526
DT Journal
LA English
CC 9-4 (Biochemical Methods)
Section cross-reference(s): 13
AB A new semiautomated apparatus, the Trombometer 761, for nephelometric measurement of **fibrin** formation was applied to various coagulation assays. For plasma prothrombin complex, similar clotting times, and for activated partial **thromboplastin** time (APTT)

shorter clotting times, were registered with the instrument than with manual testing. Low coagulation factor activity as well as heparin concentration of .apprx. 0.1-1 IU/mL plasma could be assessed with most APTT reagents. Distribution of values was similar as with manual testing but increased with heparin concentration Plasma fibrinogen concentration assessed by a **fibrin polymerization** time test gave similar values with the instrument as with a **fibrin** switch instrument. The instrument proved well suited for the assay of plasma heparin concentration by means of a thrombin time method demanding high sensitivity and for a 2-stage factor VIII assay for which exact timing and good precision is required. Thus the apparatus was suitable for end-point detns. of coagulation assays in plasma samples, especially for those demanding high sensitivity and exact timing. The plasma must not be lipemic or turbid.

ST blood coagulation test nephelometer; fibrin formation nephelometer; heparin detn plasma app; fibrinogen detn plasma app; prothrombin detn plasma app; **thromboplastin** test nephelometer

IT Fibrinogens
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in blood plasma, nephelometer for)

IT **Blood coagulation**
(**determination** of, nephelometer for)

IT Blood analysis
(fibrins and fibrinogens and heparin determination in, nephelometer for)

IT Fibrins
RL: MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(formation of, determination of, nephelometer for)

IT Nephelometers
(automated, for blood coagulation anal.)

IT 9001-26-7D, complexes 9001-27-8 9005-49-6, analysis
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in blood plasma, nephelometer for)

L55 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1976:474524 HCAPLUS
DN 85:74524
ED Entered STN: 12 May 1984
TI The effects of Hepes buffer on clotting tests, assay of factors V and VIII and on the hydrolysis of esters by thrombin and thrombokinase
AU Roberts, Phyllis S.; Hughes, Haywood N.; Fleming, Patricia B.
CS Med. Coll. Virginia, Virginia Commonw. Univ., Richmond, VA, USA
SO Thrombosis and Haemostasis (1976), 35(1), 202-10
CODEN: THHADQ; ISSN: 0340-6245
DT Journal
LA English
CC 9-6 (Biochemical Methods)
Section cross-reference(s): 13
AB Shorter clotting times were found in the presence of 50 mM Hepes (N-2-hydroxyethylpiperazine-N1-2-ethanesulfonic acid) buffer than of 50 mM imidazole buffer in 1-stage assays of factors V and VIII, in modified APTT (activated partial **thromboplastin** time) and PT (prothrombin times) tests and in tests of the clotting of human plasma by purified human thrombin. All tests were performed at ionic strength 0.155 in the presence of either Hepes, NaOH, or imidazole-HCl buffer, pH 7.4 at 37°. The faster clotting in the presence of Hepes buffer, therefore, is probably due, at least in part, to acceleration by Hepes of thrombin's enzymic action on fibrinogen and/or of the **polymerization** of the **fibrin** monomers. Hepes also may have effects on other blood clotting reactions. Rates of hydrolysis of TAME or BAME (p-toluenesulfonyl- or benzoyl-L-arginine Me ester) at pH 7.4, 37° by purified human or bovine thrombin were essentially the same in 200 mM Hepes as in 250 mM Tris-HCl buffer (rates in Hepes-NaOH or Hepes-KOH buffers were compared with those in Tris-HCl plus NaCl for KCl). However, with purified bovine thrombokinase, rates of TAME hydrolysis in Hepes buffer were accelerated and rates of BAME hydrolysis slightly inhibited. Hepes, therefore, reacts with thrombokinase but whether this accelerates

(or inhibits) the rate of converting prothrombin to thrombin remains to be determined In addition, Hepes has an inhibitory effect on clotting since increasing the concentration of Hepes from 50 mM to 200 mM inhibits clotting in the PT, APTT and bovine thrombin-human plasma tests. The clotting times were the same in the presence of 50 mM Tris-HCl as in imidazole-HCl buffers in APTT tests at 3 ionic strengths but they differed slightly in plasma-thrombin tests. Depending upon the ionic strength, 17 mM Na barbital-HCl buffer inhibited APTT tests but accelerated plasma-thrombin tests.

ST blood clotting test buffer effect

IT Buffer substances and systems
(blood-coagulation determination in relation to)

IT **Blood coagulation**
(**determination** of, buffer effects on)

IT 77-86-1 144-02-5 288-32-4 7365-45-9
RL: ANST (Analytical study)
(buffer, blood coagulation in presence of)

IT 9001-24-5 9001-27-8
RL: ANT (Analyte); ANST (Analytical study)
(determination of, buffer effects on)

IT 9002-04-4 9002-05-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(ester hydrolysis by, buffer effect on)

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